

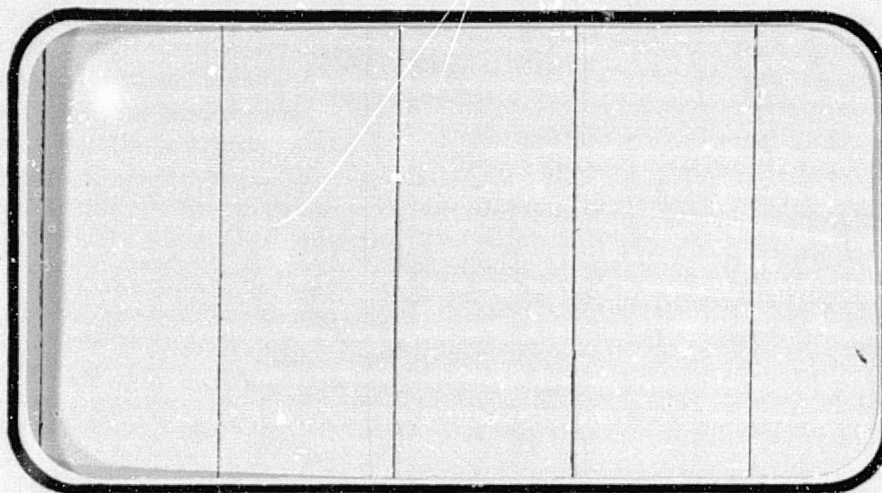
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NATIONAL AERONAUTICS AND SPACE ADMINISTRATION



(NASA-CR-147606) RESULTS OF TEST MA22 IN
THE NASA/LARC 31-INCH CFHT ON AN 0.010-SCALE
MODEL (32-0) OF THE SPACE SHUTTLE
CONFIGURATION 3 TO DETERMINE RCS JET FLOW
FIELD INTERACTION. VOLUME 3 (Chrysler

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SPACE SHUTTLE

AEROTHERMODYNAMIC DATA REPORT

JOHNSON SPACE CENTER

HOUSTON, TEXAS

DATA MANAGEMENT services

SPACE DIVISION



CHRYSLER
CORPORATION



May, 1976

DMS-DR-2267
NASA CR-147,606
VOLUME 3 OF 4

RESULTS OF TEST MA22 IN THE NASA/LaRC 31-INCH CFHT
ON AN 0.010-SCALE MODEL (32-0) OF THE
SPACE SHUTTLE CONFIGURATION 3 TO DETERMINE
RCS JET FLOW FIELD INTERACTION

by

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by

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Engineering Analysis Division
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Houston, Texas

WIND TUNNEL TEST SPECIFICS:

Test Number: LaRC CFHT 118
NASA Series Number: MA22
Model Number: 32-0
Test Dates: May 6, 1975 through June 3, 1975
Occupancy Hours: 168

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RESULTS OF TEST MA22 IN THE NASA/LaRC 31-INCH CFHT
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ABSTRACT

Test MA22 was conducted in the Langley Research Center 31-inch Continuous Flow Hypersonic Wind Tunnel from May 6, 1975 through June 3, 1975. The primary objectives of this test were the following: 1) to study the ability of the wind tunnel to repeat, on a run-to-run basis, data taken for identical configurations to determine if errors in repeatability could have a significant effect on jet interaction data, 2) to determine the effect of model heating on jet interaction, 3) to investigate the effects of elevon and body flap deflections on RCS jet interaction, 4) to determine if the effects from jets fired separately along different axes can be added to equal the effects of the jets fired simultaneously (super position effects), 5) to study multiple jet effects, and 6) to investigate area ratio effects, i.e., the effect on jet interaction measurements of using nozzles with different area ratios in the same location. The model used in the test was a .010-scale model of the Space Shuttle Orbiter Configu-

ABSTRACT (Concluded)

ration 3. The test was conducted at Mach 10.3 and a dynamic pressure of 150 psf. RCS chamber pressure was varied to simulate free flight dynamic pressures of 5, 7.5, 10, and 20 psf.

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- (D) CN, CLM, CAU, CBL, CYN, CY versus TEMP
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NOMENCLATURE
General

<u>SYMBOL</u>	<u>SADSAC SYMBOL</u>	<u>DEFINITION</u>
a		speed of sound; m/sec, ft/sec
C_p	CP	pressure coefficient; $(p_1 - p_\infty)/q$
M	MACH	Mach number; V/a
p		pressure; N/m ² , psf
q	Q(NSM) Q(PSF)	dynamic pressure; $1/2\rho V^2$, N/m ² , psf
RN/L	RN/L	unit Reynolds number; per m, per ft
V		velocity; m/sec, ft/sec
α	ALPHA	angle of attack, degrees
β	BETA	angle of sideslip, degrees
ψ	PSI	angle of yaw, degrees
ϕ	PHI	angle of roll, degrees
ρ		mass density; kg/m ³ , slugs/ft ³

Reference & C.G. Definitions

A_b		base area; m ² , ft ²
b	BREF	wing span or reference span; m, ft
c.g.		center of gravity
$\frac{l}{c}_{REF}$	LREF	reference length or wing mean aerodynamic chord; m, ft
S	SREF	wing area or reference area; m ² , ft ²
	MRP	moment reference point
	XMRP	moment reference point on X axis
	YMRP	moment reference point on Y axis
	ZMRP	moment reference point on Z axis

SUBSCRIPTS

b	base
l	local
s	static conditions
t	total conditions
∞	free stream

NOMENCLATURE (Continued)

Body-Axis System

<u>SYMBOL</u>	<u>SADSAC SYMBOL</u>	<u>DEFINITION</u>
C_N	CN	normal-force coefficient; $\frac{\text{normal force}}{qS}$
C_A	CAU	axial-force coefficient; $\frac{\text{axial force}}{qS}$ (uncorrected)
C_Y	CY	side-force coefficient; $\frac{\text{side force}}{qS}$
C_{A_b}	CAB	base-force coefficient; $\frac{\text{base force}}{qS}$ $-A_b(p_b - p_\infty)/qS$
C_{A_f}	CAF	forebody axial force coefficient, $C_A - C_{A_b}$
C_m	CLM	pitching-moment coefficient; $\frac{\text{pitching moment}}{qS l_{REF}}$
C_n	CYN	yawing-moment coefficient; $\frac{\text{yawing moment}}{qS b}$
C_l	CLL	rolling-moment coefficient; $\frac{\text{rolling moment}}{qS b}$

Stability-Axis System

C_L	CL	lift coefficient; $\frac{\text{lift}}{qS}$
C_D	CD	drag coefficient; $\frac{\text{drag}}{qS}$
C_{D_b}	CDB	base-drag coefficient; $\frac{\text{base drag}}{qS}$
C_{D_f}	CDF	forebody drag coefficient; $C_D - C_{D_b}$
C_Y	CY	side-force coefficient; $\frac{\text{side force}}{qS}$
C_m	CLM	pitching-moment coefficient; $\frac{\text{pitching moment}}{qS l_{REF}}$
C_n	CLN	yawing-moment coefficient; $\frac{\text{yawing moment}}{qS b}$
C_l	CLL	rolling-moment coefficient; $\frac{\text{rolling moment}}{qS b}$
L/D	L/D	lift-to-drag ratio; C_L/C_D
L/D_f	L/DF	lift to forebody drag ratio; C_L/C_{D_f}

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NOMENCLATURE (Continued)

<u>Symbol</u>	<u>Plot Symbol</u>	<u>Definition</u>
A_e		nozzle exit area, in ²
$C_{\ell j}$		RCS jet rolling moment coefficient, $(T_{\ell_\ell})/(qSb)$
$C_{m j}$		RCS jet pitching moment coefficient, $(T_{\ell_m})/(qS\bar{c})$
$C_{n j}$		RCS jet yawing moment coefficient, $(T_{\ell_n})/(qSb)$
$C_{A j}$		RCS jet axial force coefficient, $(T)/(qS)$
$C_{N j}$		RCS jet normal force coefficient, $(T)/(qS)$
$C_{Y j}$		RCS jet side force coefficient, $(T)/(qS)$
e		nozzle expansion ratio
h		altitude, feet
k_j		model nozzle thrust calibration factor, lbs/psia
ℓ_ℓ		RCS nozzle rolling moment arm, in
ℓ_m		RCS nozzle pitching moment arm, in
ℓ_n		RCS nozzle yawing moment arm, in
ℓ_{orb}		Orbiter body length, in
LH		left hand side
\dot{m}_j		RCS jet mass flow rate, lbm/sec
M_j		RCS jet exit Mach number
N_ℓ	N(RM)	RCS roll jet amplification factor, $(\Delta C_{\ell})/(C_{\ell j})$

NOMENCLATURE (Continued)

<u>Symbol</u>	<u>Plot Symbol</u>	<u>Definition</u>
N_m	N(PM)	RCS pitch jet amplification factor, $(\Delta C_m)/(C_{mj})$
N_n	N(YM)	RCS yaw jet amplification factor, $(\Delta C_n)/(C_{nj})$
N_A	N(AF)	RCS axial force jet amplification factor, $(\Delta C_{A_u})/(C_{Aj})$
N_N	N(NF)	RCS normal force jet amplification factor, $(\Delta C_N)/(C_{Nj})$
N_y	N(SF)	RCS side force jet amplification factor, $(\Delta C_y)/(C_{yj})$
P_c	PC RCS	model RCS nozzle plenum chamber pressure, psia
P_j		RCS jet exit pressure, psia
RCS		reaction control system
RH		right hand side
RT		product of RCS nozzle gas constant and temperature, (ft-lb)/lb
T		RCS thrust, lbs
T_c	TC RCS	RCS chamber temperature, °R
U		velocity, ft/sec
U_j		RCS jet velocity, ft/sec
X_0		Orbiter longitudinal station, in
Y_0		Orbiter lateral station, in
Z_0		Orbiter vertical station, in
ΔC_{ℓ}	DLTCBL	incremental rolling moment coefficient due to RCS jet interaction

NOMENCLATURE (Continued)

<u>Symbol</u>	<u>Plot Symbol</u>	<u>Definition</u>
ΔC_m	DLTCLM	incremental pitching moment coefficient due to RCS jet interaction
ΔC_n	DLTCYN	incremental yawing moment coefficient due to RCS jet interaction
ΔC_N	DLTCN	incremental normal force coefficient due to RCS jet interaction
ΔC_y	DLTCY	incremental side force coefficient due to RCS jet interaction
ΔC_{A_u}	DLTCAU	incremental axial force coefficient due to RCS jet interaction (uncorrected for base pressure)
γ		jet gas specific heat ratio
Σk_i		sum of model nozzle thrust calibration factors for all nozzles installed on model during a given test run, lbs/psia
θ		RCS nozzle angle, deg.
T/q_A	T/QA	RCS thrust divided by freestream dynamic pressure times unit area
	T/QA-1	one jet RCS thrust divided by freestream dynamic pressure times unit area
ΔN_ℓ	DN(RM)	incremental RCS jet amplification factor - rolling moment
ΔN_m	DN(PM)	incremental RCS jet amplification factor - pitching moment
ΔN_n	DN(YM)	incremental RCS jet amplification factor - yawing moment
ΔN_N	DN(NF)	incremental RCS jet amplification factor - normal force

NOMENCLATURE (Concluded)

<u>Symbol</u>	<u>Plot Symbol</u>	<u>Definition</u>
ΔN_Y	DN(SF)	incremental RCS jet amplification factor - side force
ΔN_A	DN(AF)	incremental RCS jet amplification factor - axial force
σ		one standard deviation from the mean
\bar{X}		computed mean
δ_{BF}	BDFLAP	Orbiter body flap surface deflection angle, positive deflection trailing edge down, degrees
δ_e	ELEVON	Orbiter elevon surface deflection angle, positive deflection trailing edge down, degrees
	NO. JET	number of RCS jets firing
	TEMP	wing temperature, degrees Fahrenheit

REMARKS

After being subjected to Mach 10 airflow at a dynamic pressure of 150 psf for a period of time, wind tunnel models tend to heat up to temperatures as high as 500°F. Therefore, in an effort to determine whether or not model heating could affect jet interaction measurements, the model was inserted into the tunnel and data was taken as the model heated up. At each data point the temperature of the model wing was recorded by hand. These temperatures can be found in Table VII. Both RCS jets-on and RCS jets-off data were taken as a function of wing temperature. Little effect was observed.

CONFIGURATIONS INVESTIGATED

Three kinds of model changes were required for this test: 1) body flap, 2) elevons, and 3) non-metric RCS nozzle blocks. Twenty two nozzle blocks were used in this test. Nozzles N43, N44, N47, N48, N49, N50, N51, N52, and N61 were used in tests OA85 and OA105. Nozzles N31, N32, N33, N34, N36, and N37 were used in test LA25. Nozzles N78, N79, N81, N82, N83, N84, and N85 were used in test OA82. Nozzle configurations are summarized in Table IV.

Two body flap configurations, in addition to the zero degree setting, were tested. The body flap deflections tested were 13.75° and -14.25° . Similarly, elevon deflections tested were 10° and -30° .

INSTRUMENTATION

The LaRC 0.75-inch six-component 2019A internal balance was used for this test program.

No model base or balance chamber pressures were measured during the test. The RCS supply pressure was set and monitored at the plenum chamber between the left hand and right hand RCS nozzle blocks.

TEST FACILITY DESCRIPTION

The Mach 10 nozzle of the Langley Continuous Flow Hypersonic Tunnel is designed to operate at stagnation pressures of 15 to 150 atmospheres at temperatures up to 1960° R. Air is preheated electrically by passing through a multi-tube heater. The nozzle has a 31-inch square test section which incorporates a moveable second minimum. Continuous operation is achieved by passing the air through a series of compressors. Additional information on this facility is given in NASA TM X-1130 entitled, "Characteristics of Major Active Wind Tunnels at the Langley Research Center", by William T. Schaefer, Jr.

DATA REDUCTION

Aerodynamic forces and moments were reduced to coefficient form using the following reference dimensions:

Reference Area:

$$\begin{aligned} S &= 0.269 \text{ ft}^2 (38.736 \text{ in}^2), \text{ model scale} \\ &= 2690.0 \text{ ft}^2, \text{ full scale} \end{aligned}$$

Reference Lengths:

$$\begin{aligned} \bar{c} &= 4.748 \text{ in. model scale} \\ &= 474.8 \text{ in. full scale} \\ b &= 9.367 \text{ in. model scale} \\ &= 936.7 \text{ in. full scale} \end{aligned}$$

The moments were reduced about a moment reference center located at:

$$\begin{aligned} \text{Orbiter station } 10.767 \text{ at } Y_o = 0.00 \text{ and } Z_o = 3.75 \text{ model scale} \\ X_o = 1076.7, Y_o = 0.0, \text{ and } Z_o = 375.0 \text{ full scale} \end{aligned}$$

Standard LRC data reduction techniques were employed for reducing the data to coefficient form.

Reduced coefficient data were used to determine RCS jet interaction amplification factors. Incremental coefficient data (ΔC_m , ΔC_l , ΔC_n , ΔC_y , and ΔC_{A_U}) were computed to provide effects of RCS jets. Amplification factors were computed for each plane of action:

$$N_m = \frac{\Delta C_m}{C_{m_j}} = \frac{\frac{\Delta C_m}{(T l_m)}}{\frac{q S \bar{c}}{P_{C l_m} \sum k_j}} = \frac{q S \bar{c}}{P_{C l_m} \sum k_j} \Delta C_m$$

$$N_l = \frac{\Delta C_l}{C_{l_j}} = \frac{\frac{\Delta C_l}{(T l_l)}}{\frac{q S b}{P_{C l_l} \sum k_i}} = \frac{q S b}{P_{C l_l} \sum k_i} \Delta C_l$$

DATA REDUCTION (Continued)

$$N_n = \frac{\Delta C_n}{C_{nj}} = \frac{\Delta C_n}{\left(\frac{T \ell_n}{qSb}\right)} = \frac{qSb}{P_c \ell_n \Sigma k_i} \Delta C_n$$

$$N_N = \frac{\Delta C_N}{C_{Nj}} = \frac{\Delta C_N}{\left(\frac{T}{qS}\right)} = \frac{qS}{P_c \Sigma k_i} \Delta C_N$$

$$N_Y = \frac{\Delta C_Y}{C_{Yj}} = \frac{\Delta C_Y}{\left(\frac{T}{qS}\right)} = \frac{qS}{P_c \Sigma k_i} \Delta C_Y$$

$$N_A = \frac{\Delta C_{Au}}{C_{Aj}} = \frac{\Delta C_{Au}}{\left(\frac{T}{qS}\right)} = \frac{qS}{P_c \Sigma k_i} \Delta C_{Au}$$

where

ℓ_m = RCS pitch jet moment arm
= 4.523 in model scale

ℓ_ℓ = RCS roll jet moment arm
= 1.110 in model scale

ℓ_n = RCS yaw jet moment arm
= 4.588 in model scale

Σk_i = sum of k_i 's for all nozzles firing in the same thrust plane, k_i given in Table VI

S, \bar{c}, b = as given above

The resulting factors (N's) represent amplification of Orbiter aerodynamic forces caused by RCS jet interaction with the Orbiter flow field. They are normalized by RCS jet thrusts to allow easy use in control analysis.

The incremental RCS jet amplification factors due to a control surface deflection of amount "a" were computed as follows:

DATA REDUCTION (Concluded)

$$\Delta N_m = N_{m\delta=a} - N_{m\delta=0}$$

$$\Delta N_l = N_{l\delta=a} - N_{l\delta=0}$$

$$\Delta N_n = N_{n\delta=a} - N_{n\delta=0}$$

$$\Delta N_N = N_{N\delta=a} - N_{N\delta=0}$$

$$\Delta N_Y = N_{Y\delta=a} - N_{Y\delta=0}$$

$$\Delta N_A = N_{A\delta=a} - N_{A\delta=0}$$

These factors (ΔN 's) represent the incremental effect of control surface deflections on RCS jet interaction.

The incremental coefficient data do not include thrust forces since the model nozzles were non-metric. Increments and amplification factors were computed for each force and moment plane using data from each nozzle that was tested. This provides both direct (e.g. ΔC_m due to pitch jet) and cross-coupling (e.g. ΔC_m due to yaw jet) effects. Resulting data are presented in the data figures.

REFERENCES

1. DMS-DR-2195 (NASA-CR-134,442) "Results of Test OA82 in the NASA/LRC 31-Inch CFHT on an 0.010-Scale Model (32-0) of the Space Shuttle Configuration 3 to Determine RCS Jet Flow Field Interaction and to Investigate RT Real Gas Effects" by D. E. Thornton, January 1975.

TEST : MA22

DATE : July, 1975

TEST CONDITIONS	
TEST NO.	1000
TEST DATE	10/10/10
TEST TIME	10:00
TEST LOCATION	1000
TEST METHOD	1000
TEST RESULT	1000
TEST COMMENTS	1000

[illegible]

BALANCE UTILIZED: LaRC 2019A

	CAPACITY:	ACCURACY:	COEFFICIENT TOLERANCE:
NF	<u>70 lbs</u>	<u>0.35 lbs</u>	<u> </u>
SF	<u>25 lbs</u>	<u>0.125 lbs</u>	<u> </u>
AF	<u>15 lbs</u>	<u>0.075 lbs</u>	<u> </u>
PM	<u>70 in-lbs</u>	<u>0.35 in-lbs</u>	<u> </u>
RM	<u>15 in-lbs</u>	<u>0.075 in-lbs</u>	<u> </u>
YM	<u>25 in-lbs</u>	<u>0.125 in-lbs</u>	<u> </u>

COMMENTS:

TEST: CFHT 118 (MA-22)

DATA SET/RUN NUMBER COLLATION SUMMARY

DATE: 7/11/75

DATA SET IDENTIFIER	CONFIGURATION	SCHD.		JETS	PARAMETERS/VALUES								NO. OF RUNS	MACH NUMBERS				
		α	β		T/RA-1	S_e	S_{eF}							10.3				
* RJA003	Ø1N49	D	0°	2	95.0	0°	0							3				TEST RUN NUMBERS
RJA403					0.0									403				
RJA005					0.0									5				
RJA006					95.0									6				
RJA011					95.0									11				
RJA411	↓	↓			0.0									411				
RJA012	Ø1N31	A			0.0									12				
13					47.5									13				
14					0.0									14				
15					95.0									15				
16	↓				190.0									16				
17	Ø1N34				47.5									17				
18					95.0									18				
19	↓				127.7									19				
20	Ø1N47				47.5									20				
21					95.0									21				
22	↓				127.7									22				
Y 23	Ø1N43	Y	Y	Y	47.5	Y	Y							23				

* BETTA, ICAM, ICN, ICLM, ICL, ICYN, ICY, ICL, ICD, T/RA, MACH, ALPHA												
COEFFICIENTS												
α OR β	A, $\alpha = -8^\circ$ to 10° ; $\Delta\alpha = 2^\circ$ & $\alpha = 15^\circ$ to 35° ; $\Delta\alpha = 5^\circ$											IDVAR (1)
SCHEDULES	D, $\alpha = -10^\circ, 0, 10^\circ, 20^\circ$ & 35° .											IDVAR (2)
												NOV

* "3" DATASETS CONTAIN Q(PSE), PCRS, T/RA, L/D as dependent VARIABLES.

 $\phi = B_9 C_7 E_{23} F_5 M_6 R_5 V_7 W_{107}$

TEST: CFHT 118 (MA-22)

DATA SET/RUN NUMBER COLLATION SUMMARY

DATE: 7/11/75

DATA SET IDENTIFIER	CONFIGURATION	SCHED.		PARAMETERS/VALUES								NO. OF RUNS	MACH NUMBERS			
		α	β	Jets	$T/QA-1$	Se	S_{BF}						10.3			
RJA024	$\emptyset 1N43$	A	0°	2	0.0	0°	0°						24			
25					0.0								25			
26					95.0								26			
27	✓				127.7								27			
28	$\emptyset 1N79N78$				47.5								28			
29					95.0								29			
30					190.0	✓							30			
31					0.0	-30°							31			
32					47.5								32			
33					95.0								33			
34					190.0	✓							34			
35					0.0	$+10^\circ$							35			
36					47.5								36			
37					95.0								37			
38	✓			✓	190.0								38			
39	$\emptyset 1N78$			1	190.0								39			
40	$\emptyset 1N85$			2	190.0		✓						40			
✓ 41	✓	✓	✓	✓	0.0	✓	-14.25									
1	7	13	19	25	31	37	43	49	55	61	67	75	76			
COEFFICIENTS																
α OR β		A, $\alpha = -8^\circ$ to 10° ; $\Delta\alpha = 2^\circ$ & $\alpha = 15^\circ$ to 35° ; $\Delta\alpha = 5^\circ$														
SCHEDULES		D, $\alpha = -10^\circ, 0, 10^\circ, 20^\circ$ & 35° .														
													IDVAR (1)	IDVAR (2)	NDV	

TEST RUN NUMBERS

TEST: CFHT 118 (MA-22)

DATA SET/RUN NUMBER COLLATION SUMMARY

DATE: 7/11/75

DATA SET IDENTIFIER	CONFIGURATION	SCHED.		JETS	PARAMETERS/VALUES					NO. OF RUNS	MACH NUMBERS			
		α	β		$T/QA-1$	Se	S_{AF}				10.3			
RJA042	Ø1N85	A	0°	2	190.0	+10°	-14.25				42			
43	Ø1N78			1	↓		↓				43			
44	Ø1N79N78			2	↓		↓				44			
45	↓			↓	0.0		+13.75				45			
46	↓			↓	190.0						46			
47	Ø1N78			1	↓						47			
48	Ø1N85			2	0.0						48			
49	↓			↓	190.0						49			
50	↓			↓	0.0		-14.25				50			
51	↓			↓	47.5						51			
52	Ø1N78			1	↓						52			
53	Ø1N79N78			2	↓	↓	↓				53			
54	Ø1N78			1	0.0	-30°	0°				54			
55	↓			↓	190.0						55			
56	Ø1N85			2	↓	↓					56			
57	Ø1N32			↓	0.0	0°					57			
58	↓			↓	47.5						58			
✓ 59	✓	✓	✓	✓	95.0	✓	✓				59			

TEST RUN NUMBERS

1 7 13 19 25 31 37 43 49 55 61 67 75 76

 α OR β
SCHEDULES

COEFFICIENTS
 A, $\alpha = -8^\circ$ to 10° ; $\Delta\alpha = 2^\circ$ & $\alpha = 15^\circ$ to 35° ; $\Delta\alpha = 5^\circ$
 D, $\alpha = -10^\circ, 0, 10^\circ, 20^\circ$ & 35° .

IDVAR (1) IDVAR (2) NDV

TEST: CFHT 118 (MA-22)

DATA SET/RUN NUMBER COLLATION SUMMARY

DATE: 7/11/75

DATA SET IDENTIFIER	CONFIGURATION	SCHD.		PARAMETERS/VALUES								NO. OF RUNS	MACH NUMBERS			
		α	β	Jets	$T/QA-1$	δ_e	δ_{AF}						10.3			
RJA060	$\emptyset 1N32$	A	0°	2	190.0	0°	0°						60			
61	$\emptyset 1N36$				47.5								61			
62	↓				95.0								62			
63	↓				127.7								63			
64	$\emptyset 1N48$				47.5								64			
65	↓				95.0								65			
66	↓				127.7								66			
67	$\emptyset 1N44$				47.5								67			
68	↓				95.0								68			
69	↓			↓	127.7								69			
70	$\emptyset 1N78$			1	47.5								70			
71	↓			↓	95.0								71			
72	↓			↓	190.0								72			
73	$\emptyset 1N85$			2	47.5								73			
74	↓			↓	190.0								74			
75	↓				95.0								75			
76	$\emptyset 1N33$				0.0								76			
↓ 77	↓	↓	↓	↓	47.5	↓	↓						77			
1	7	13	19	25	31	37	43	49	55	61	67	73	79	85	91	97
<div> <div> <div>α OR β</div> <div>SCHEDULES</div> </div> <div> <div>COEFFICIENTS</div> <div> $A, \alpha = -8^\circ \text{ to } 10^\circ; \Delta \alpha = 2^\circ \text{ \& } \alpha = 15^\circ \text{ to } 35^\circ; \Delta X = 5^\circ$ $D, \alpha = -10^\circ, 0, 10^\circ, 20^\circ \text{ \& } 35^\circ$ </div> </div> <div> <div>IDVAR (1)</div> <div>IDVAR (2)</div> <div>NDV</div> </div> </div>																

TEST RUN NUMBERS

TEST: CFHT 118 (MA-22)

DATA SET/RUN NUMBER COLLATION SUMMARY

DATE: 7/11/75

DATA SET IDENTIFIER	CONFIGURATION	SCHED.		PARAMETERS/VALUES								NO. OF RUNS	MACH NUMBERS			
		α	β	Jets	T/QA	S_e	S_{RF}						10.3			
RJA078	$\emptyset 1N33$	A	0°	2	95.0	0°	0°						78			
79	↓				190.0								79			
80	$\emptyset 1N37$				47.5								80			
81	↓				95.0								81			
82	↓				127.7								82			
83	$\emptyset 1N61$				47.5								83			
84	↓				95.0								84			
85	↓				127.7								85			
86	$\emptyset 1N84$				0.0								86			
87	↓				47.5								87			
88					95.0								88			
89		✓	✓		127.7								89			
90		D	0°		0.0								90			
91			-3°										91			
92			+3°		↓								92			
93			0°		47.5								93			
94			-3°		↓								94			
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TEST: CFHT 118 (HA-22)

DATA SET/RUN NUMBER COLLATION SUMMARY

DATE: 7/11/75

DATA SET IDENTIFIER	CONFIGURATION	SCHD.		PARAMETERS/VALUES								NO. OF RUNS	MACH NUMBERS				TEST RUN NUMBERS
		α	β	Jets	T/QA^{-1}	S_e	S_{BF}										
RJA096	$\emptyset 1N84$	D	0°	2	95.0	0°	0°							10.3			
097			-3°											96			
098			+3°		↓									97			
099			0°		127.7									98			
100			-3°											99			
101	↓		+3°		↓									100			
102	$\emptyset 1N85N50$		0°		0.0									101			
103			-3°											102			
104			+3°		↓									103			
105			0°		47.5									104			
106			-3°											105			
107			+3°		↓									106			
108			0°		95.0									107			
109			-3°											108			
110			+3°		↓									109			
111			0°		127.7									110			
112			-3°											111			
↓ 113	↓	↓	+3°	↓	↓	↓	↓							112			
														113			
1	7	13	19	25	31	37	43	49	55	61	67	75	76				
COEFFICIENTS																	
$A, \alpha = -8^\circ \text{ to } 10^\circ; \Delta\alpha = 2^\circ \text{ \& } \alpha = 15^\circ \text{ to } 35^\circ; \Delta\alpha = 5^\circ$																	
$D, \alpha = -10^\circ, 0, 10^\circ, 20^\circ \text{ \& } 35^\circ.$																	
IDVAR (1) IDVAR (2) NDV																	
α OR β																	
SCHEDULES																	

TEST: CFHT 118 (MA-22)

DATA SET/RUN NUMBER COLLATION SUMMARY

DATE: 7/11/75

DATA SET IDENTIFIER	CONFIGURATION	SCHD.		PARAMETERS/VALUES								NO. OF RUNS	MACH NUMBERS			
		α	β	Jets	$T/QA-1$	Se	S_{BE}						10.3			
RJA114	Ø1N85N50	A	0°	2	0.0	0°	0°						114			
115	↓				47.5								115			
116	↓				95.0								116			
117	↓				127.7								117			
118	Ø1N85		↓		47.5								118			
119			-3°		↓								119			
120			+3°		↓								120			
121			0°		95.0								121			
122			-3°		↓								122			
123			+3°		↓								123			
124			0°		190.0								124			
125			-3°		↓								125			
126	↓		+3°	↓	↓								126			
127	Ø1N51		0°	4	47.5								127			
128			-3°	↓	↓								128			
129			+3°	↓	↓								129			
130			0°	↓	95.0								130			
↓ 131	↓	↓	-3°	↓	↓	↓	↓						131			
<div> <div>1</div> <div>7</div> <div>13</div> <div>19</div> <div>25</div> <div>31</div> <div>37</div> <div>43</div> <div>49</div> <div>55</div> <div>61</div> <div>67</div> <div>75</div> <div>75</div> </div>																
<div> <div> <div>α OR β</div> <div>SCHEDULES</div> </div> <div> <div>COEFFICIENTS</div> <div> A, $\alpha = -8^\circ$ to 10°; $\Delta\alpha = 2^\circ$ & $\alpha = 15^\circ$ to 35°; $\Delta\alpha = 5^\circ$ D, $\alpha = -10^\circ, 0, 10^\circ, 20^\circ$ & 35°. </div> </div> <div> <div>IDVAR (1)</div> <div>IDVAR (2)</div> <div>NCV</div> </div> </div>																

TEST RUN NUMBERS

TEST: CFHT 118 (MA-22)

DATA SET/RUN NUMBER COLLATION SUMMARY

DATE: 7/11/75

DATA SET IDENTIFIER	CONFIGURATION	SCHD.		PARAMETERS/VALUES										NO. OF RUNS	MACH NUMBERS			
		α	β	Jets	T/RA-1	S ₂	S _{BE}								10.3			
RJA132	Ø1N51	D	+3°	4	95.0	0°	0°								132			
133			0°		127.7										133			
134			-3°												134			
135			+3°		↓										135			
136			0°		0.0										136			
137			-3°												137			
138		↓	+3°		↓										138			
139		A	0°		47.5										139			
140					95.0										140			
141					127.7										141			
142	↓	↓		↓	0.0										142			
143	Ø1N78	D	↓	1											143			
144			-3°												144			
145			+3°		↓										145			
146			0°		47.5										146			
147			-3°												147			
148			+3°		↓										148			
↓ 149	↓	↓	0°	↓	95.0	↓	↓								149			

TEST RUN NUMBERS

 α OR β
SCHEDULES

COEFFICIENTS
 A, $\alpha = -8^\circ$ to 10° ; $\Delta\alpha = 2^\circ$ & $\alpha = 15^\circ$ to 35° ; $\Delta\alpha = 5^\circ$
 D, $\alpha = -10^\circ, 0, 10^\circ, 20^\circ$ & 35° .

IDVAR (1) IDVAR (2) NDV

TEST: CFHT 118 (MA-22)

DATA SET/RUN NUMBER COLLATION SUMMARY

DATE: 7/11/75

DATA SET IDENTIFIER	CONFIGURATION	SCHD.		PARAMETERS/VALUES										NO. OF RUNS	MACH NUMBERS			
		α	β	Jets	T/QA-1	Se	S _{BF}								10.3			
RJA150	Ø1N78	D	-3°	1	95.0	0°	0°								150			
151			+3°		↓										151			
152			0°		190.0										152			
153			-3°		↓										153			
154	↓		+3°	↓	↓										154			
155	Ø1N52		0°	2	47.5										155			
156			-3°		↓										156			
157			+3°		↓										157			
158			0°		95.0										158			
159			-3°		↓										159			
160			+3°		↓										160			
161			0°		190.0										161			
162			-3°		↓										162			
163		↓	+3°		↓										163			
164		A	0°		47.5										164			
165					95.0										165			
166	↓			↓	190.0										166			
✓ 167	Ø1N82	↓	↓	3	47.5	↓	↓								167			

TEST RUN NUMBERS

1 7 13 19 25 31 37 43 49 55 61 67 75 76

α OR β
SCHEDULES

COEFFICIENTS
A, $\alpha = -8^\circ$ to 10° ; $\Delta\alpha = 2^\circ$ & $\alpha = 15^\circ$ to 35° ; $\Delta\alpha = 5^\circ$
D, $\alpha = -10^\circ, 0, 10^\circ, 20^\circ$ & 35° .

IDVAR (1) IDVAR (2) NDV

TEST: CFHT 118 (MA-22)

DATA SET/RUN NUMBER COLLATION SUMMARY

DATE: 7/11/75

DATA SET IDENTIFIER	CONFIGURATION	SCHD.		PARAMETERS/VALUES								NO. OF RUNS	MACH NUMBERS			
		α	β	ϵ	$T/QA-1$	ϵ	SRE						10.3			
RJA168	$\emptyset 1N82$	A	0°	3	95.0	0°	0°						168			
169					190.0								169			
170		\downarrow			0.0								170			
171		D	\downarrow		190.0								171			
172			-3°		\downarrow								172			
173			$+3^\circ$		\downarrow								173			
174			0°		0.0								174			
175			-3°		\downarrow								175			
176			$+3^\circ$		\downarrow								176			
177			0°		\downarrow								177			
178			-3°		\downarrow								178			
179			$+3^\circ$		\downarrow								179			
180			0°		47.5								180			
181			-3°		\downarrow								181			
182			$+3^\circ$		\downarrow								182			
183			0°		95.0								183			
184			-3°		\downarrow								184			
\downarrow 185	\downarrow	\downarrow	$+3^\circ$	\downarrow	\downarrow	\downarrow	\downarrow						185			

TEST RUN NUMBERS

1 7 13 19 25 31 37 43 49 55 61 67 75 7E

COEFFICIENTS

IDVAR (1) IDVAR (2) NDV

 α OR β
SCHEDULESA, $\alpha = -8^\circ$ to 10° ; $\Delta\alpha = 2^\circ$ & $\alpha = 15^\circ$ to 35° ; $\Delta\alpha = 5^\circ$
D, $\alpha = -10^\circ, 0, 10^\circ, 20^\circ$ & 35° .

TEST: CFHT 118 (MA-22)

DATA SET/RUN NUMBER COLLATION SUMMARY

DATE: 7/11/75

DATA SET IDENTIFIER	CONFIGURATION	SCHD.		PARAMETERS/VALUES								NO. OF RUNS	MACH NUMBERS			
		α	β	Jets	T/QA-1	Se	SEE						10.3			
RJA186	Ø1N79	0	0°	1	47.5	0°	0°						186			
187			-3°										187			
188			+3°		↓								188			
189			0°		95.0								189			
190			-3°		↓								190			
191			+3°		↓								191			
192			0°		190.0								192			
193			-3°		↓								193			
194		✓	+3°		↓								194			
195		A	0°		0.0								195			
196					47.5								196			
197				✓	95.0								197			
198	↓			1	190.0								198			
199	Ø1N49			2	47.5								199			
200				T	95.0								200			
201					190.0								201			
202		✓			0.0								202			
✓ 203	✓	D	✓	✓	47.5	✓	✓						203			

TEST RUN NUMBERS

1 7 13 19 25 31 37 43 49 55 61 67 75 76

 α OR β
SCHEDULESCOEFFICIENTS
A, $\alpha = -8^\circ$ to 10° ; $\Delta\alpha = 2^\circ$ & $\alpha = 15^\circ$ to 35° ; $\Delta\alpha = 5^\circ$
D, $\alpha = -10^\circ, 0, 10^\circ, 20^\circ$ & 35° .

IDVAR (1) IDVAR (2) NDV

TEST: CFHT 118 (MA-22)

DATA SET/RUN NUMBER COLLATION SUMMARY

DATE: 7/11/75

DATA SET IDENTIFIER	CONFIGURATION	SCHED.		PARAMETERS/VALUES										NO. OF RUNS	MACH NUMBERS			
		α	β	Jets	$T/QA-1$	S_e	S_{RF}								10.3			
RJA204	$\emptyset 1N49$	D	-3°	2	47.5	0°	0°								204			
205			+3°		↓										205			
206			0°		95.0										206			
207			-3°		↓										207			
208			+3°		↓										208			
209			0°		190.0										209			
210			-3°		↓										210			
211	↓		+3°	↓	↓										211			
212	$\emptyset 1N83$		0°	3	47.5										212			
213			-3°	T	↓										213			
214			+3°		↓										214			
215			0°		0.0										215			
216			-3°		↓										216			
217			+3°		↓										217			
218			0°		↓										218			
219			-3°		↓										219			
220			+3°		↓										220			
✓ 221	↓	↓	0°	↓	95.0	↓	↓								221			
1	7	13	19	25	31	37	43	49	55	61	67	73	75	75				
α OR β SCHEDULES		COEFFICIENTS													IDVAR (1) IDVAR (2) NO.			
		A, $\alpha = -8^\circ$ to 10° ; $\Delta\alpha = 2^\circ$ & $\alpha = 15^\circ$ to 35° ; $\Delta\alpha = 5^\circ$ D, $\alpha = -10^\circ, 0, 10^\circ, 20^\circ$ & 35° .																

TEST RUN NUMBERS

TEST: CFHT 118 (MA-22)

DATA SET/RUN NUMBER COLLATION SUMMARY

DATE: 7/11/75

DATA SET IDENTIFIER	CONFIGURATION	SCHD.		PARAMETERS/VALUES										NO. OF RUNS	MACH NUMBERS			
		α	β	Jets	T/QA^{-1}	S_e	S_{AF}								10.3			
RJA222	01N83	0	-3°	3	95.0	0°	0°								222			
223			+3°		↓										223			
224			0°		190.0										224			
225			-3°		↓										225			
226		↓	+3°		↓										226			
227		A	0°		0.0										227			
228					190.0										228			
229					95.0										229			
230	↓	↓		↓	47.5										230			
231	01N79N78	D	↓	2	↓										231			
232			-3°		↓										232			
233			+3°		↓										233			
234			0°		95.0										234			
235			-3°		↓										235			
236			+3°		↓										236			
237			0°		190.0										237			
238			-3°		↓										238			
↓ 239	↓	↓	+3°	↓	↓	↓	↓								239			

TEST RUN NUMBERS

1	7	13	19	25	31	37	43	49	55	61	67	75	76
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α OR β
SCHEDULES

COEFFICIENTS
A, $\alpha = -8^\circ$ to 10° ; $\Delta\alpha = 2^\circ$ & $\alpha = 15^\circ$ to 35° ; $\Delta\alpha = 5^\circ$
D, $\alpha = -10^\circ, 0, 10^\circ, 20^\circ$ & 35° .

IDVAR (1) IDVAR (2) NDV

TEST: CFHT 118 (MA-22)

DATA SET/RUN NUMBER COLLATION SUMMARY

DATE: 7/11/75

DATA SET IDENTIFIER	CONFIGURATION	SCHD.		PARAMETERS/VALUES							NO. OF RUNS	BATCH NUMBERS			
		α	β	Jets	$T/QA-1$	Se	S_{RF}					10			
RJA240	Ø1N79N78	A	0°	2	0.0	0°	13.75					240			
241					47.5							241			
242					95.0							242			
243	↓			↓	190.0							243			
244	Ø1N79			1	0.0							244			
245				T	47.5							245			
246					95.0							246			
247	↓			↓	190.0							247			
248	Ø1N85N50			2	47.5							248			
249				T	95.0							249			
250	↓				127.7							250			
251	Ø1N49				47.5							251			
252					95.0							252			
253	↓			↓	190.0							253			
254	Ø1N83			3	47.5							254			
255				T	95.0							255			
256					190.0							256			
✓ 257	↓	↓	↓	↓	0.0	↓	-14.25					257			

TEST RUN NUMBERS

7

13

19

25

31

37

43

49

55

61

67

75 76

α OR β
SCHEDULES

COEFFICIENTS
A, $\alpha = -8^\circ$ to 10° ; $\Delta\alpha = 2^\circ$ & $\alpha = 15^\circ$ to 35° ; $\Delta\alpha = 5^\circ$
D, $\alpha = -10^\circ, 0, 10^\circ, 20^\circ$ & 35° .

IDVAR (1) IDVAR (2) NCY

TEST: CFHT 118 (MA-22)				DATA SET/RUN NUMBER COLLATION SUMMARY										DATE: 7/11/75				
DATA SET IDENTIFIER	CONFIGURATION	SCHD.		PARAMETERS/VALUES										NO. OF RUNS	MACH NUMBERS			
		α	β	Jets	T/QA-1	Se	S _{OE}								10.3			
RJA258	<u>Ø1N83</u>	A	0°	3	47.5	0°	-14.25								258			
259	↓				0.0										259			
260	↓				95.0										260			
261	↓			↓	190.0										261			
262	<u>Ø1N49</u>			2	47.5										262			
263	↓			T	95.0										263			
264	↓				190.0										264			
265	<u>Ø1N85N50</u>				47.5										265			
266	↓				95.0										266			
267	↓			↓	127.7										267			
268	<u>Ø1N79</u>			1	47.5										268			
269	↓			T	95.0										269			
270	↓			↓	190.0										270			
271	<u>Ø1N79N78</u>			2	47.5										271			
272				T	95.0										272			
273					190.0										273			
274	↓				0.0	↓									274			
✓ 275	↓	↓	↓	↓	0.0	-30°	↓											
1 7 13 19 25 31 37 43 49 55 61 67 75 76																		
α OR β		COEFFICIENTS										IDVAR (1) IDVAR (2) NOV						
SCHEDULES		A, $\alpha = -8^\circ$ to 10° ; $\Delta\alpha = 2^\circ$ & $\alpha = 15^\circ$ to 35° ; $\Delta\alpha = 5^\circ$																
		D, $\alpha = -10^\circ, 0, 10^\circ, 20^\circ$ & 35° .																

TEST RUN NUMBERS

TEST: CFHT 118 (MA-22)

DATA SET/RUN NUMBER COLLATION SUMMARY

DATE: 7/11/75

DATA SET IDENTIFIER	CONFIGURATION	SCHED.		PARAMETERS/VALUES								NO. OF RUNS	MACH NUMBERS			
		α	β	Jets	$T/RA-1$	Se	S_{AE}						10.3			
RJA276	$\emptyset 1N79N78$	A	0°	2	47.5	-30°	-14.25						276			
277					0.0								277			
278					95.0								278			
279	↓			↓	190.0								279			
280	$\emptyset 1N79$			1	47.5								280			
281				↓	95.0								281			
282	↓			↓	190.0								282			
283	$\emptyset N85N50$			2	47.5								283			
284				↓	95.0								284			
285	↓			↓	127.7								285			
286	$\emptyset 1N49$			2	47.5								286			
287				↓	95.0								287			
288				↓	190.0								288			
289	↓			↓	0.0								289			
290	$\emptyset 1N83$			3	0.0								290			
291				↓	47.5								291			
292				↓	95.0								292			
↓ 293	↓	↓	↓	↓	190.0	↓	↓						293			
1	7	13	19	25	31	37	43	49	55	61	67	75	75	75	75	75
<div> <div> <div>α OR β</div> <div>SCHEDULES</div> </div> <div> <div>COEFFICIENTS</div> <div> $A, \alpha = -8^\circ \text{ to } 10^\circ; \Delta \alpha = 2^\circ \text{ \& } \alpha = 15^\circ \text{ to } 35^\circ; \Delta K = 5^\circ$ $D, \alpha = -10^\circ, 0, 10^\circ, 20^\circ \text{ \& } 35^\circ$ </div> </div> <div> <div>IDVAR (1)</div> <div>IDVAR (2)</div> <div>NOV</div> </div> </div>																

TEST RUN NUMBERS

TEST: CFHT 118 (MA-22)

DATA SET/RUN NUMBER COLLATION SUMMARY

DATE: 7/11/75

DATA SET IDENTIFIER	CONFIGURATION	SCHD.		PARAMETERS/VALUES								NO. OF RUNS	MACH NUMBERS			
		α	β	lets	T/RA-1	δ_e	SBE						10.3			
RJA294	Ø1N83	A	0°	3	0.0	-30°	0°						294			
295	↓				47.5								295			
296	↓				95.0								296			
297	↓			↓	190.0								297			
298	Ø1N49			2	47.5								298			
299	↓			↓	95.0								299			
300	↓			↓	190.0								300			
301	Ø1N79			1	47.5								301			
302	↓			↓	95.0								302			
303	↓			↓	190.0								303			
304	Ø1N84			2	47.5								304			
305	↓			↓	95.0								305			
306	↓			↓	127.7								306			
307	↓			↓	0.0								307			
308	Ø1N85			2	0.0								308			
309	↓			↓	47.5								309			
310	↓			↓	95.0								310			
↓ 311	Ø1N85N50	↓	↓	2	47.5	↓	↓						311			

TEST RUN NUMBERS

1 7 13 19 25 31 37 43 49 55 61 67 73 76

 α OR β
SCHEDULESCOEFFICIENTS
A, $\alpha = -8^\circ$ to 10° ; $\Delta\alpha = 2^\circ$ & $\alpha = 15^\circ$ to 35° ; $\Delta\alpha = 5^\circ$
D, $\alpha = -10^\circ, 0, 10^\circ, 20^\circ$ & 35° .

IDVAR (1) IDVAR (2) NCV

TEST: CFHT 118 (MA-22)

DATA SET/RUN NUMBER COLLATION SUMMARY

DATE: 7/11/75

DATA SET IDENTIFIER	CONFIGURATION	SCHED.		PARAMETERS/VALUES								NO. OF RUNS	MACH NUMBERS			
		α	β	Jets	$T/RA-1$	Δe	ΔBE						10.3			
RJA312	Ø1N85N50	A	0°	2	95.0	-30°	0°						312			
313	↓			↓	127.7								313			
314	Ø1N51			4	47.5								314			
315					95.0								315			
316					127.7								316			
317					0.0	↓							317			
318					0.0	+10°							318			
319					47.5								319			
320					95.0								320			
321	↓			↓	127.7								321			
322	Ø1N85			2	47.5								322			
323					95.0								323			
324	↓			↓	0.0								324			
325	Ø1N85N50			2	0.0								325			
326					47.5								326			
327					95.0								327			
328	↓				127.7								328			
329	Ø1N84	↓	↓	↓	47.5	↓	↓						329			

TEST RUN NUMBERS

α OR β
SCHEDULES

COEFFICIENTS
A, $\alpha = -8^\circ$ to 10° ; $\Delta\alpha = 2^\circ$ & $\alpha = 15^\circ$ to 35° ; $\Delta K = 5^\circ$
D, $\alpha = -10^\circ, 0, 10^\circ, 20^\circ$ & 35° .

IOVAR (1) IOVAR (2) NDV

TEST: CFHT 118 (MA-22)

DATA SET/RUN NUMBER COLLATION SUMMARY

DATE: 7/11/75

DATA SET IDENTIFIER	CONFIGURATION	SCHD.		PARAMETERS/VALUES							NO. OF RUNS	MACH NUMBERS			
		α	β	Jets	$T/RA-1$	S_e	S_{RF}					10.3			
RJA330	$\emptyset 1N84$	A	0°	2	95.0	+10°	0°					330			
331	↓			↓	127.7							331			
332	$\emptyset 1N79$			1	47.5							332			
333	↓			T	95.0							333			
334	↓			↓	190.0							334			
335	$\emptyset 1N49$			2	47.5							335			
336	↓			T	95.0							336			
337	↓			↓	190.0							337			
338	$\emptyset 1N83$			3	47.5							338			
339	↓			T	95.0							339			
340					190.0							340			
341					0.0							341			
342					0.0		↓ 13.75					342			
343					47.5							343			
344					0.0							344			
345					95.0							345			
346	↓			↓	190.0							346			
Y 347	$\emptyset 1N49$	↓	↓	2	47.5	↓	↓					347			

TEST RUN NUMBERS

1 7 13 19 25 31 37 43 49 55 61 67 73 76

 α OR β
SCHEDULESCOEFFICIENTS
A, $\alpha = -8^\circ$ to 10° ; $\Delta\alpha = 2^\circ$ & $\alpha = 15^\circ$ to 35° ; $\Delta\alpha = 5^\circ$
D, $\alpha = -10^\circ, 0, 10^\circ, 20^\circ$ & 35° .

IDVAR (1) IDVAR (2) NDV

TEST: CFHT 118 (MA-22)

DATA SET/RUN NUMBER COLLATION SUMMARY

DATE: 7/11/75

DATA SET IDENTIFIER	CONFIGURATION	SCHD.		PARAMETERS/VALUES							NO. OF RUNS	MACH NUMBERS			
		α	β	Jets	T/QA	Se	SAF					10.3			
RJA348	Ø1N49	A	0°	2	95.0	+10°	13.75						348		
349	↓				190.0								349		
350	Ø1N85N50				47.5								350		
351	↓				95.0								351		
352	↓			✓	127.7								352		
353	Ø1N79			1	47.5								353		
354	↓				95.0								354		
355	↓			✓	190.0								355		
356	Ø1N79N78			2	47.5								356		
✓ 357	↓	✓	✓	2	95.0	✓	✓						357		
* RJA007	Ø1N49 Wing Temp	0°	0°		95.0	0°	0°						7		
407		↓			0.0								407		
008		-10°			95.0								8		
408		↓			0.0								408		
009		20°			95.0								9		
409		↓			0.0								409		
010		35°			95.0								10		
✓ 410	✓	↓	✓	✓	0.0	✓	✓						410		
1	7	13	19	25	31	37	43	49	55	61	67	75	75		
* ALPHA	ICAM	ICN	ICLM	ICBL	ICYN	ICY	ICL	ICD	T/QA	MACH	TEMP				
α OR β		COEFFICIENTS													
SCHEDULES		A, α = -8° to 10°; $\Delta\alpha$ = 2° & α = 15° to 35°; $\Delta\alpha$ = 5°													
		D, α = -10°, 0, 10°, 20° & 35°.													
		IDVAR (1) IDVAR (2) NOV													

* "S" DATA SETS CONTAIN BETA, Q(PSF), PCRS, T/QA, L/D AS DEPENDENT VARIABLES.

TABLE III. - MODEL DIMENSIONAL DATA

MODEL COMPONENT : BODY - B19

GENERAL DESCRIPTION : Fuselage, Configuration 3, per Rockwell

Lines VL70-000139B

NOTE: Identical to B17 except forebody.

MODEL SCALE: 0.010

DRAWING NUMBER : VL70-000139B

DIMENSIONS :	FULL SCALE	MODEL SCALE
Length , In.	<u>1290.3</u>	<u>12.903</u>
Max Width , In.	<u>267.6</u>	<u>2.676</u>
Max Depth , In.	<u>244.5</u>	<u>2.445</u>
Fineness Ratio	<u>4.82175</u>	<u>4.82175</u>
Area- Ft ₂	<u></u>	<u></u>
Max. Cross-Sectional	<u>386.67</u>	<u>0.0387</u>
Planform	<u></u>	<u></u>
Wetted	<u></u>	<u></u>
Base	<u></u>	<u></u>

TABLE III (CONT'D)

MODEL COMPONENT : BODY FLAP - F₅

GENERAL DESCRIPTION : Configuration 3 per Rockwell Lines VL70-000139.

MODEL SCALE: 0.010

DRAWING NUMBER: VL70-000139

DIMENSIONS :	FULL SCALE	MODEL SCALE
Length, In.	<u>84.70</u>	<u>0.847</u>
Max Width, In.	<u>267.6</u>	<u>2.676</u>
Max Depth	<u> </u>	<u> </u>
Fineness Ratio	<u> </u>	<u> </u>
Area - Ft ³	<u> </u>	<u> </u>
Max. Cross-Sectional	<u> </u>	<u> </u>
Planform	<u>142.5</u>	<u>0.0143</u>
Wetted	<u> </u>	<u> </u>
Base	<u>38.0958</u>	<u>0.0038</u>

TABLE III (CONT'D)

MODEL COMPONENT : CANOPY - C₇

GENERAL DESCRIPTION : Configuration 3 per Rockwell Lines VL70-000139

MODEL SCALE: 0.010

DRAWING NUMBER : VL70-000139

DIMENSIONS :	FULL SCALE	MODEL SCALE
Length ($X_o=433$ to $X_o=578$), In.	<u>145.0</u>	<u>1.450</u>
Max Width	<u> </u>	<u> </u>
Max Depth	<u> </u>	<u> </u>
Fineness Ratio	<u> </u>	<u> </u>
Area	<u> </u>	<u> </u>
Max. Cross-Sectional	<u> </u>	<u> </u>
Planform	<u> </u>	<u> </u>
Wetted	<u> </u>	<u> </u>
Base	<u> </u>	<u> </u>

TABLE III (CONT'D)

MODEL COMPONENT: ELEVON - E₂₃GENERAL DESCRIPTION: Configuration 3 per W₁₀₇ Rockwell Lines Drawing
VL70-000139B. Data for (1) of (2) sides.MODEL SCALE: 0.010DRAWING NUMBER: VL70-000139B

<u>DIMENSIONS:</u>	<u>FULL-SCALE</u>	<u>MODEL SCALE</u>
Area - Ft ²	<u>205.52</u>	<u>0.0206</u>
Span (equivalent), In.	<u>353.34</u>	<u>3.533</u>
Inb'd equivalent chord, In.	<u>114.78</u>	<u>1.148</u>
Outb'd equivalent chord, In.	<u>55.00</u>	<u>0.550</u>
Ratio movable surface chord/ total surface chord		
At Inb'd equiv. chord	<u>0.208</u>	<u>0.208</u>
At Outb'd equiv. chord	<u>0.400</u>	<u>0.400</u>
Sweep Back Angles, degrees		
Leading Edge	<u>0.00</u>	<u>0.00</u>
Tailing Edge	<u>- 10.24</u>	<u>-10.24</u>
Hingeline	<u>0.00</u>	<u>0.00</u>
Area Moment (Normal to hinge line)-Ft ³ (Product of Area and c)	<u>1548.07</u>	<u>0.00155</u>

TABLE III (CONT'D)

MODEL COMPONENT: MPS NOZZLES - N₃₉GENERAL DESCRIPTION: Configuration 3A MPS nozzles.MODEL SCALE: 0.010

DRAWING NUMBER: _____

DIMENSIONS:

	<u>FULL SCALE</u>	<u>MODEL SCALE</u>
MACH NO.		
Length - In.		
Gimbal Point to Exit Plane		
Throat to Exit Plane		
Diameter - In.		
Exit	<u>94.000</u>	<u>0.940</u>
Throat		
Inlet		
Area - ft ²		
Exit	<u>48.193</u>	<u>0.00482</u>
Throat		
Gimbal Point (Station) - In.		
Upper Nozzle		
X		
Y		
Z		
	NOT USED	
Lower Nozzles		
X	<u>1468.2</u>	<u>14.682</u>
Y	<u>53.0</u>	<u>0.530</u>
Z	<u>342.7</u>	<u>3.427</u>
Null Position - Deg.		
Upper Nozzle		
Pitch		
Yaw		
	NOT USED	
Lower Nozzle		
Pitch		
Yaw		

TABLE III. (CONT'D)

MODEL COMPONENT: NOZZLE - N31

GENERAL DESCRIPTION: RCS nozzle providing left-hand pitch-down control.

MODEL SCALE: .010

DRAWING NO.:

DIMENSIONS:

	<u>MODEL SCALE</u>
Flight dynamic pressure simulation - PSF	
Cant angle - deg.	
Aft	12
Outboard	20
Diameter - In.	
Exit	.0990
Throat	.0921
Area - In. ²	
Exit	.007698
Throat	.006662
Area ratio	1.15
No. of nozzles	2

TABLE III. (CONT'D)

MODEL COMPONENT: NOZZLE - N32

GENERAL DESCRIPTION: RCS nozzle providing right-hand pitch-up control.

MODEL SCALE: .010

DRAWING NO.:

DIMENSIONS:

	<u>MODEL SCALE</u>
Flight dynamic pressure simulation - PSF	
Cant angle - deg.	
Aft	0
Outboard	0
Diameter - In.	
Exit	.0990
Throat	.0921
Area - In. ²	
Exit	.007698
Throat	.006662
Area ratio	1.15
No. of nozzles	2

TABLE III. (CONT'D)

MODEL COMPONENT: NOZZLE - N33

GENERAL DESCRIPTION: RCS nozzle to provide left-hand yaw control.

MODEL SCALE: .010

DRAWING NO.:

DIMENSIONS:

	<u>MODEL SCALE</u>
Flight dynamic pressure simulation - PSF	
Cant angle - deg.	
Aft	0
Outboard	0
Diameter - In.	
Exit	.0990
Throat	.0921
Area - In. ²	
Exit	.007698
Throat	.006662
Area ratio	1.15
No. of nozzles	2

TABLE III. (CONT'D)

MODEL COMPONENT: NOZZLE - N34

GENERAL DESCRIPTION: RCS nozzle to provide left-hand pitch-down control.

MODEL SCALE: .010

DRAWING NO.:

DIMENSIONS:

	<u>MODEL SCALE</u>
Flight dynamic pressure simulation - PSF	
Cant angle - deg.	
Aft	12
Outboard	20
Diameter - In.	
Exit	.0878
Throat	.0520
Area - In. ²	
Exit	.006055
Throat	.002124
Area ratio	2.85
No. of nozzles	2

TABLE III. (CONT'D)

MODEL COMPONENT: NOZZLE - N36

GENERAL DESCRIPTION: RCS nozzle to provide left-hand pitch-up control

MODEL SCALE: .010

DRAWING NO.:

DIMENSION:

	<u>MODEL SCALE</u>
Flight dynamic pressure simulation - PSF	
Cant angle - deg.	
Aft	0
Outboard	0
Diameter - In.	
Exit	.0878
Throat	.0520
Area - In. ²	
Exit	.006055
Throat	.002124
Area ratio	2.85
No. of nozzles	2

TABLE III. (CONT'D)

MODEL COMPONENT: NOZZLE - N37

GENERAL DESCRIPTION: RCS nozzle to provide left-hand yaw control.

MODEL SCALE: .010

DRAWING NO.:

DIMENSIONS:

	<u>MODEL SCALE</u>
Flight dynamic pressure simulation - PSF	
Cant angle - deg.	
Aft	0
Outboard	0
Diameter - In.	
Exit	.0878
Throat	.0520
Area - In. ²	
Exit	.006055
Throat	.002124
Area ratio	2.85
No. of nozzles	2

TABLE III. (CONT'D)

MODEL COMPONENT: NOZZLE - N43

GENERAL DESCRIPTION: RCS nozzle to provide left-hand pitch-down control to simulate entry.

MODEL SCALE: .010

DRAWING NO.:

DIMENSIONS:

	<u>MODEL SCALE</u>
Flight dynamic pressure simulation - PSF	5
Cant angle - deg.	
Aft	12
Outboard	20
Diameter - In.	
Exit	.129
Throat	.0465
Area - In. ²	
Exit	.013070
Throat	.001698
Area ratio	7.70
No. of nozzles	2

TABLE III. (CONT'D)

MODEL COMPONENT: NOZZLE - N44

GENERAL DESCRIPTION: RCS nozzle to provide right-hand pitch-up control to simulate entry.

MODEL SCALE: .010

DRAWING NO.:

DIMENSIONS:

	<u>MODEL SCALE</u>
Flight dynamic pressure simulation - PSF	5
Cant angle - deg.	
Aft	0
Outboard	0
Diameter - In.	
Exit	.129
Throat	.0465
Area - In. ²	
Exit	.013070
Throat	.001698
Area ratio	7.7
No. of nozzles	2

TABLE III. (CONT'D)

MODEL COMPONENT: NOZZLE - N47

GENERAL DESCRIPTION: RCS nozzle to provide left-hand pitch-down control to simulate entry.

MODEL SCALE: .010

DRAWING NO.:

DIMENSIONS:

	<u>MODEL SCALE</u>
Flight dynamic pressure simulation - PSF	20
Cant angle - deg.	
Aft	12
Outboard	20
Diameter - In.	
Exit	.117
Throat	.0465
Area - In. ²	
Exit	.010751
Throat	.001698
Area ratio	6.33
No. of nozzles	2

TABLE III. (CONT'D)

MODEL COMPONENT: NOZZLE - N48

GENERAL DESCRIPTION: RCS nozzle to provide right-hand pitch-up control to simulate entry.

MODEL SCALE: .010

DRAWING NO.:

DIMENSIONS:

	<u>MODEL SCALE</u>
Flight dynamic pressure simulation - PSF	20
Cant angle - deg.	
Aft	0
Outboard	0
Diameter - In.	
Exit	.117
Throat	.0465
Area - In. ²	
Exit	.010751
Throat	.001698
Area ratio	6.33
No. of nozzles	2

TABLE III (CONT'D)

MODEL COMPONENT: NOZZLE - N₄₉

GENERAL DESCRIPTION: RCS Nozzle providing left-hand pitch-down control to simulate return to launch site (RTLS)

MODEL SCALE: 0.010

DRAWING NO.: SS-A01160-19

DIMENSIONS:	<u>MODEL SCALE</u>
Flight dynamic pressure simulation - PSF	20
Cant Angle - deg.	
Aft	12
Outboard	20
Diameter - In.	
Exit	0.141
Throat	0.0670
Area - In. ²	
Exit	0.015614
Throat	0.003525
Area Ratio	4.430
No. of nozzles	2

TABLE III (CONT'D)

MODEL COMPONENT: NOZZLE - N₅₀

GENERAL DESCRIPTION: RCS nozzle providing righthand pitch-down control to simulate return to launch site (RTLS).

MODEL SCALE: 0.010

DRAWING NO.: SS-A01160-20

DIMENSIONS:	<u>MODEL SCALE</u>
Flight dynamic pressure simulation - PSF	20
Cant angle - deg.	
Aft	12
Outboard	20
Diameter - In.	0.141
Exit	0.151
Throat	0.0670
Area - In. ²	
Exit	0.015614
Throat	0.003525
Area ratio	4.430
No. of nozzles	2

TABLE III (CONT'D)

MODEL COMPONENT: NOZZLE - N51

GENERAL DESCRIPTION: RCS nozzle providing left-hand yaw control to simulate return to launch site (RTLIS).

MODEL SCALE: 0.010

DRAWING NO.: SS-A01160-11

DIMENSIONS:

MODEL SCALE

Flight dynamic pressure simulation - PSF	20
Cant angle - Deg.	
Aft	0
Outboard	0
Diameter - In.	
Exit	0.141
Throat	0.0670
Area - In. ²	
Exit	0.015614
Throat	0.003525
Area ratio	4.430
No. of nozzles	4

TABLE III (CONT'D)

MODEL COMPONENT: NOZZLE - N₅₂

GENERAL DESCRIPTION: RCS nozzle providing right-hand pitch-up control to simulate return to launch site (RTLS).

MODEL SCALE: 0.010

DRAWING NO.: SS-A01160-12

DIMENSIONS:	<u>MODEL SCALE</u>
Flight dynamic pressure simulation - PSF	20
Cant angle - deg.	
Aft	0
Outboard	0
Diameter - In.	
Exit	0.141
Throat	0.0670
Area - In. ²	
Exit	0.015614
Throat	0.003525
Area ratio	4.430
No. of nozzles	2

TABLE III. (CONT'D)

MODEL COMPONENT: NOZZLE - N61

GENERAL DESCRIPTION: RCS nozzle to provide left-hand yaw control to simulate entry.

MODEL SCALE: .010

DRAWING NO.:

DIMENSIONS:

	<u>MODEL SCALE</u>
Flight dynamic pressure simulation - PSF	5
Cant angle - deg.	
Aft	0
Outboard	0
Diameter - In.	
Exit	.129
Throat	.0465
Area - In. ²	
Exit	.013070
Throat	.001698
Area ratio	7.70
No. of nozzles	2

TABLE III (CONT'D)

MODEL COMPONENT: NOZZLE - N₇₈

GENERAL DESCRIPTION: RCS nozzle providing right-hand up-firing control to simulate return to launch site (RTLS).

MODEL SCALE: 0.010

DRAWING NO.: SS-A01160

DIMENSIONS:

MODEL SCALE:

Flight dynamic pressure simulation - PSF	20
Cant angle - deg.	
Aft	0
Outboard	0
Diameter - In.	
Exit	0.141
Throat	0.0670
Area - In. ²	
Exit	0.015614
Throat	0.003525
Area ratio	4.430
No. of nozzles	1

TABLE III (CONT'D)

MODEL COMPONENT: NOZZLE - N79

GENERAL DESCRIPTION: RCS nozzle providing left-hand pitch-down control to simulate return to launch site (RTLS).

MODEL SCALE: 0.010

DRAWING NO.:

DIMENSIONS:

MODEL SCALE

Flight dynamic pressure simulation - PSF	20
Cant angle - deg.	
Aft	12
Outboard	20
Diameter - In.	
Exit	0.141
Throat	0.0670
Area - In. ²	
Exit	0.015615
Throat	0.003525
Area ratio	4.430
No. of nozzles	1

TABLE III (CONT'D)

MODEL COMPONENT: NOZZLE - N₈₁

GENERAL DESCRIPTION: RCS nozzle providing left-hand pitch-up control to simulate return to launch site (RTLS).

MODEL SCALE: 0.010

DRAWING NO.:

DIMENSIONS:	<u>MODEL SCALE</u>
Flight dynamic pressure simulation - PSF	20
Cant angle - Deg.	
Aft	0
Outboard	0
Diameter - In.	
Exit	0.141
Throat	0.0670
Area - In. ²	
Exit	0.015614
Throat	0.003525
Area ratio	4.430
No. of nozzles	2

TABLE III (CONT'D)

MODEL COMPONENT: NOZZLE - N82

MODEL DESCRIPTION: RCS nozzle providing right-hand pitch-up control
to simulate return to launch site (RTLS).

MODEL SCALE: 0.010

DIMENSIONS:

MODEL SCALE

Flight dynamic pressure simulation - PSF	20
Cant angle - deg.	
Aft	0
Outboard	0
Diameter - In.	
Exit	0.141
Throat	0.0670
Area - In. ²	
Exit	0.015614
Throat	0.003525
Area ratio	4.430
No. of nozzles	3

TABLE III (CONT'D)

MODEL COMPONENT: NOZZLE - N₈₃

GENERAL DESCRIPTION: RCS nozzle providing left-hand pitch-down control to simulate return to launch site (RTLS).

MODEL SCALE: 0.010

DRAWING NO.:

DIMENSIONS:	<u>MODEL SCALE</u>
Flight dynamic pressure simulation - PSF	20
Cant angle - deg.	
Aft	12
Outboard	20
Diameter - In.	
Exit	0.141
Throat	0.0670
Area - In. ²	
Exit	0.015614
Throat	0.003525
Area ratio	4.430
No. of nozzles	3

TABLE III (CONT'D)

MODEL COMPONENT: NOZZLE - N84

GENERAL DESCRIPTION: RCS nozzle providing right-hand pitch-up control to simulate return to launch site (RTLIS).

MODEL SCALE: 0.010

DRAWING NO.:

DIMENSIONS:	<u>MODEL SCALE</u>
Flight dynamic pressure simulation - PSF	20
Cant angle - deg.	
Aft	0
Outboard	0
Diameter - In.	
Exit	0.141
Throat	0.0670
Area - In. ²	
Exit	0.015614
Throat	0.003525
Area ratio	4.430
No. of nozzles	2

TABLE III (CONT'D)

MODEL COMPONENT: NOZZLE - N85

GENERAL DESCRIPTION: RCS nozzle providing left-hand side-firing
to simulate return to launch site (RTLS).

MODEL SCALE: 0.010

DIMENSIONS:	<u>MODEL SCALE</u>
Flight dynamic pressure simulation - PSF	20
Cant angle - deg.	
Aft	0
Outboard	0
Diameter - In.	
Exit	0.141
Throat	0.0670
Area - In. ²	
Exit	0.015614
Throat	0.003525
Area ratio	4.430
No. of nozzles	2

TABLE III (CONT'D)

MODEL COMPONENT : OMS POD - M₆GENERAL DESCRIPTION : Basic configuration 3A OMS pods with non-
metric RCS engine housing and nozzles. Same geometry as M₄MODEL SCALE: 0.010DRAWING NUMBER : VL70-000139B

DIMENSIONS :	FULL SCALE	MODEL SCALE
Length	<u>346.0</u>	<u>3.460</u>
Max Width	<u>108.0</u>	<u>1.080</u>
Max Depth	<u>113.0</u>	<u>1.130</u>
Fineness Ratio	<u> </u>	<u> </u>
Area	<u> </u>	<u> </u>
Max. Cross-Sectional	<u> </u>	<u> </u>
Planform	<u> </u>	<u> </u>
Wetted	<u> </u>	<u> </u>
Base	<u> </u>	<u> </u>
Station of aft end of RCS nozzle block	1560	15.60

TABLE III (CONT'D)

MODEL COMPONENT: RUDDER - R₅GENERAL DESCRIPTION: Configuration 140C orbiter rudder (identical to configuration 140A/B rudder)MODEL SCALE: 0.010DRAWING NUMBER: VL70-000146B, -000095

<u>DIMENSIONS:</u>	<u>FULL-SCALE</u>	<u>MODEL SCALE</u>
Area - Ft ²	<u>100.15</u>	<u>0.0100</u>
Span (equivalent), In.	<u>201.00</u>	<u>2.010</u>
Inb'd equivalent chord, In.	<u>91.585</u>	<u>0.916</u>
Outb'd equivalent chord, In.	<u>50.833</u>	<u>0.508</u>
Ratio movable surface chord/ total surface chord		
At Inb'd equiv. chord	<u>0.400</u>	<u>0.400</u>
At Outb'd equiv. chord	<u>0.400</u>	<u>0.400</u>
Sweep Back Angles, degrees		
Leading Edge	<u> </u>	<u> </u>
Tailing Edge	<u>26.25</u>	<u>26.25</u>
Hingeline	<u>34.83</u>	<u>34.83</u>
(Product of Area & \bar{c})		
Area Moment (Normal to hinge line)Ft ³	<u>610.92</u>	<u>0.000610</u>
Mean Aerodynamic Chord, In.	<u>73.2</u>	<u>0.732</u>

TABLE III (CONT'D)

MODEL COMPONENT: VERTICAL - V₇GENERAL DESCRIPTION: Centerline vertical tail, doublewedge airfoil
with rounded leading edge.NOTE: Same as V₅, but with manipulator housing removed.MODEL SCALE: 0.010DRAWING NUMBER: VL70-000139

DIMENSIONS:	<u>FULL SCALE</u>	<u>MODEL SCALE</u>
TOTAL DATA		
Area (Theo) - Ft ²		
Planform	<u>425.92</u>	<u>0.0426</u>
Span (Theo) - In.	<u>315.72</u>	<u>3.157</u>
Aspect Ratio	<u>1.675</u>	<u>1.675</u>
Rate of Taper	<u>0.507</u>	<u>0.507</u>
Taper Ratio	<u>0.404</u>	<u>0.404</u>
Sweep-Back Angles, Degrees.		
Leading Edge	<u>45.00</u>	<u>45.000</u>
Trailing Edge	<u>26.249</u>	<u>26.249</u>
0.25 Element Line	<u>41.130</u>	<u>41.130</u>
Chords:		
Root (Theo) WP	<u>268.50</u>	<u>2.685</u>
Tip (Theo) WP	<u>108.47</u>	<u>1.085</u>
MAC	<u>199.81</u>	<u>1.998</u>
Fus. Sta. of .25 MAC	<u>1463.50</u>	<u>14.635</u>
W.P. of .25 MAC	<u>635.522</u>	<u>6.355</u>
B.L. of .25 MAC	<u>0.00</u>	<u>0.00</u>
Airfoil Section		
Leading Wedge Angle - Deg.	<u>10.00</u>	<u>10.00</u>
Trailing Wedge Angle - Deg.	<u>14.920</u>	<u>14.920</u>
Leading Edge Radius	<u>2.0</u>	<u>0.020</u>
Void Area	<u>13.17</u>	<u>0.0013</u>
Blanketed Area	<u>0.00</u>	<u>0.00</u>

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*REV. 11/9/74

TABLE III. - MODEL DIMENSIONAL DATA - Concluded.

MODEL COMPONENT: WING-W₁₀₇GENERAL DESCRIPTION: Configuration 3 per Rockwell Lines VL70-000139BNOTE: Same as W₁₀₇ except cuff, airfoil and incidence angle.

TEST NO.

DWG. NO. VL70-000139BDIMENSIONS:FULL-SCALEMODEL SCALETOTAL DATAArea (Theo.) Ft^2 ORIGINAL PAGE IS
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Span (Theo) In.

Aspect Ratio

Rate of Taper

Taper Ratio

Dihedral Angle, degrees

Incidence Angle, degrees

Aerodynamic Twist, degrees

Sweep Back Angles, degrees

Leading Edge

Trailing Edge

0.25 Element Line

Chords:

Root (Theo) B.P.O.O.

Tip, (Theo) B.P.

MAC

Fus. Sta. of .25 MAC

(Z₀)* W.P. of .25 MAC(Y₀)* B.L. of .25 MACEXPOSED DATAArea (Theo) Ft^2

Span, (Theo) In. BP108

Aspect Ratio

Taper Ratio

Chords

Root BP108

Tip $1.00 \frac{b}{2}$

MAC

Fus. Sta. of .25 MAC

*W.P. of .25 MAC

B.L. of .25 MAC

Airfoil Section (Rockwell Mod NASA)
XXXX-64Root $b =$ Tip $b =$

Data for (1) of (2) Sides

Leading Edge Cuff Ft^2 Planform Area Ft^2

Leading Edge Intersects Fus M. L. @ Sta

Leading Edge Intersects Wing @ Sta

1083.4

TABLE IV. - SUMMARY OF NOZZLE NOMENCLATURE

Nozzle	Throat Dia.	Exit Dia.	Lip Angle	Type	No. of Jets	Cant
N31	0.0921	0.0990	5°	LH down firing	2	20°OUTBD,12°AFT
N32	0.0921	0.0990	5°	RH up firing	2	None
N33	0.0921	0.0990	5°	LH side firing	2	None
N34	0.0520	0.0878	9°	LH down firing	2	20°OUTBD,12°AFT
N36	0.0520	0.0878	9°	RH up firing	2	None
N37	0.0520	0.0878	9°	LH side firing	2	None
N43	0.0465	0.129	31°45'	LH down firing	2	20°OUTBD,12°AFT
N44	0.0465	0.129	31°45'	RH up firing	2	None
N47	0.0465	0.117	34°30'	LH down firing	2	20°OUTBD,12°AFT
N48	0.0465	0.117	34°30'	RH up firing	2	None
N49	0.0670	0.1413	34°15'	LH down firing	2	20°OUTBD,12°AFT
N50	0.0670	0.1413	34°15'	RH down firing	2	20°OUTBD,12°AFT
N51	0.0670	0.1413	34°15'	LH side firing	4	None
N52	0.0670	0.1413	34°15'	RH up firing	2	None
N61	0.0465	0.129	31°45'	LH side firing	2	None
N78	0.0670	0.1413	34°15'	RH up firing	1	None

TABLE IV. - Concluded

Nozzle	Throat Dia.	Exit Dia.	Lip Angle	Type	No. of Jets	Cant
N79	0.0670	0.1413	34°15'	LH down firing	1	20°OUTBD, 12°AFT
N81	0.0670	0.1413	34°15'	LH up firing	2	None
N82	0.0670	0.1413	34°15'	RH up firing	3	None
N83	0.0670	0.1413	34°15'	LH down firing	3	20°OUTBD, 12°AFT
N84	0.0670	0.1413	34°15'	Combination-RH up firing & side firing	2 up 2 side	None
N85	0.0670	0.1413	34°15'	LH side firing	2	None

TABLE V. - SIMULATION PARAMETERS

q_{∞} = 20 PSF RTLS abort separation simulation

A.	<u>Free Stream Conditions</u>	<u>Free Flight</u>	<u>Wind Tunnel</u>
	Dynamic Pressure q	20 psf	150 psf
	Mach number M	7	10.3
	*Reynolds No. RN/L	1.23×10^6	1×10^6
	Altitude h	200,000ft	--
B.	<u>RCS Jet Characteristics</u>	<u>Prototype</u>	<u>Model</u>
	Chamber Pressure P_c	150 psia	140 psi
	Chamber Temp. T_c	5450 °R	520 °R
	Specific Heat Ratio γ	1.232	1.4
	Expansion Ratio e	20	4.792
	Nozzle Angle θ	9°	34°15'
	Exit Area A_e	72.382 in ²	0.01567 in ²
	Exit Mach No. M_j	3.93	3.13
	Exit Pressure P_j	0.643 psi	3.136 psi
	Mass Flow Rate \dot{m}_j	3.287 lbm/sec	0.01067 lbm/sec
	Momentum $\dot{M}_j U_j$	903.46 lbF	0.675 lbs.
	Thrust T_j	950 lbF	.712 lbs.
C.	<u>Jet to Free Stream Parameters ($S_{ref} = 1 \text{ ft}^2$)</u>	<u>Full Scale Free Flight</u>	<u>Simulation</u>
	Thrust Ratio $\frac{T}{q S_{ref}}$	47.5	47.5 (Matched)
	Mass Flow Ratio $\frac{\dot{m}_j}{\rho U S_{ref}}$	26.4	50.6
	Momentum Ratio $\frac{\dot{M}_j U_j}{q S_{ref}}$	45.17	45 (Matched)
	Pressure Ratio $\frac{P_j}{P}$	224	224 (Matched)
	Plume Shape	Boundary up to Impact station	(Roughly Matched)

* Reynolds Number based on Orbiter length $L_{orb} = 107.5 \text{ ft.}$

TABLE VI. - THRUST COEFFICIENT FACTORS

<u>Jet</u>	<u>Gas</u>	<u>$k_j = T/P_c$ lbs/psia</u>
N31	Air	0.00692
N32	Air	0.00738
N33	Air	0.00792
N34	Air	0.00266
N36	Air	0.00261
N37	Air	0.00300
N43	Air	0.00250
N44	Air	0.00245
N47	Air	0.00237
N48	Air	0.00237
N49	Air	0.00920
N50	Air	0.00824
N51	Air	0.01620
N52	Air	0.00920
N61	Air	0.00221
N78	Air	0.00450
N79	Air	0.00460
N81	Air	0.00900
N82	Air	0.01356
N83	Air	0.01356
N84	Air	0.00886
N85	Air	0.00904

TABLE VII. - WING TEMPERATURES *

<u>Data Point</u>	<u>$\alpha = 0$</u>	<u>$\alpha = -10$</u>	<u>$\alpha = 20$</u>	<u>$\alpha = 35$</u>	<u>Jet</u>
1	221	295	181	189	ON
2	290	326	208	219	OFF
3	308	344	235	246	ON
4	327	362	264	273	OFF
5	342	375	289	291	ON
6	356	388	313	314	OFF
7	368	398	329	333	ON
8	378	408	343	353	OFF
9	386	417	359	369	ON
10	396	425	374	386	OFF
11	404	434	387	406	ON
12	412	443	397	417	OFF
13	418	450	405	429	ON
14	425	459	414	442	OFF
15	432	465	423	451	ON
16	438	472	431	463	OFF

TABLE VII. - Concluded.

<u>Data Point</u>	<u>$\alpha = 0$</u>	<u>$\alpha = -10$</u>	<u>$\alpha = 20$</u>	<u>$\alpha = 35$</u>	<u>Jet</u>
17	444	480	439	471	ON
18	450	488	446	479	OFF
19	454	495	451	489	ON
20	460	501	457	497	OFF
21	464		462	504	ON
22	469		467		OFF
23	473				ON
24	478				OFF

* degrees Fahrenheit

Notes:

1. Positive directions of force coefficients, moment coefficients, and angles are indicated by arrows
2. For clarity, origins of wind and stability axes have been displaced from the center of gravity

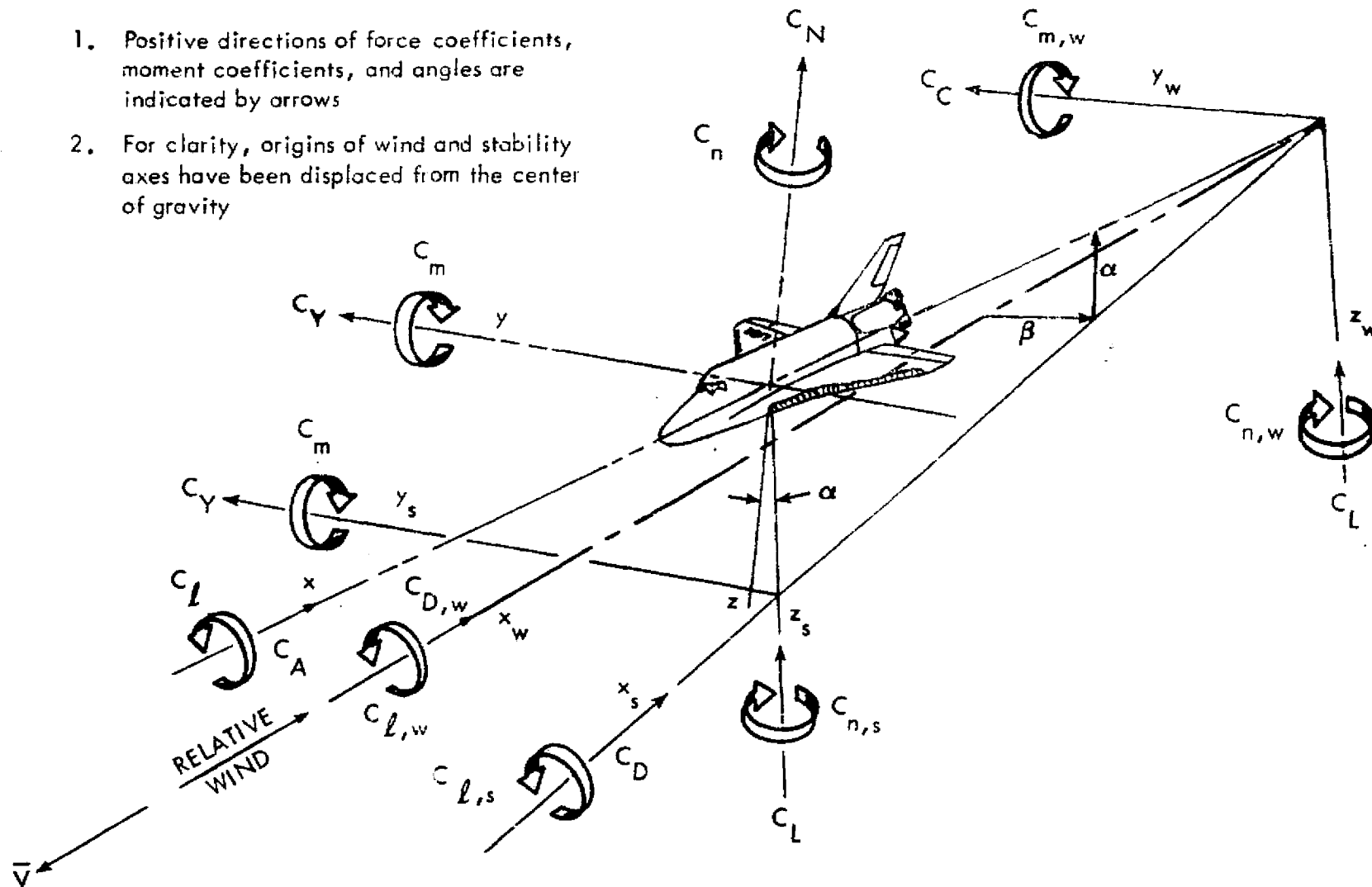
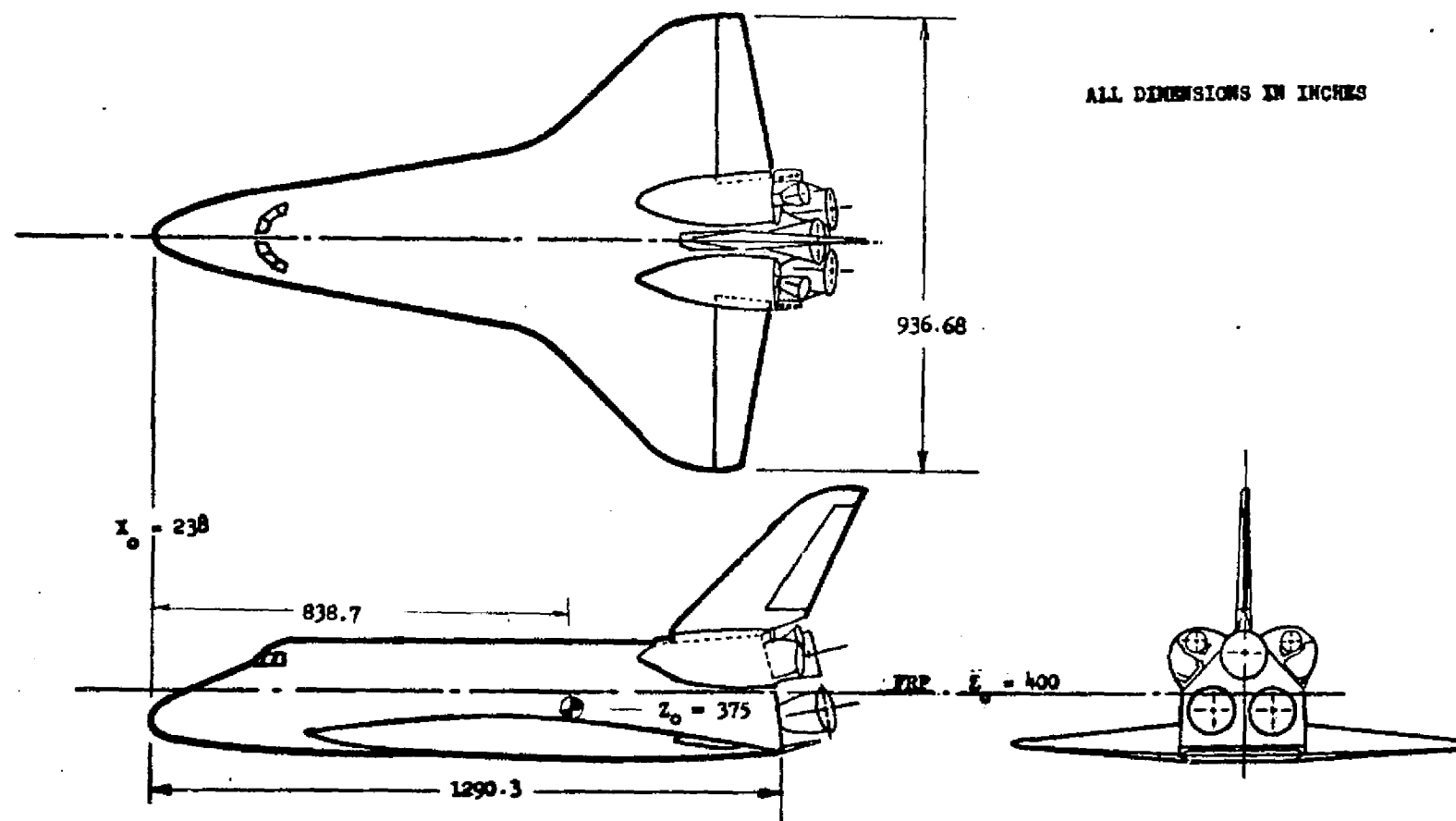
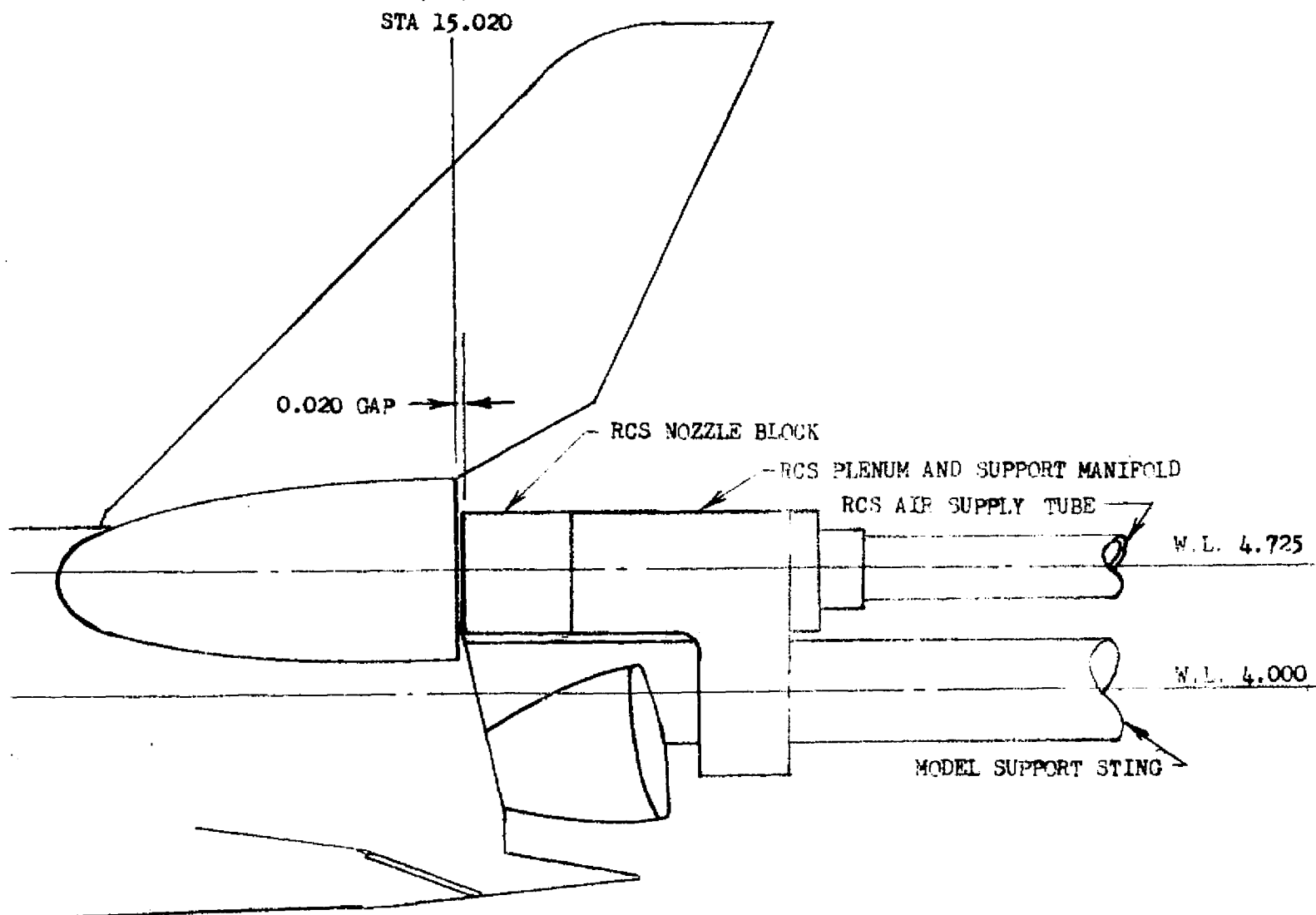


Figure 1. - Axis systems.



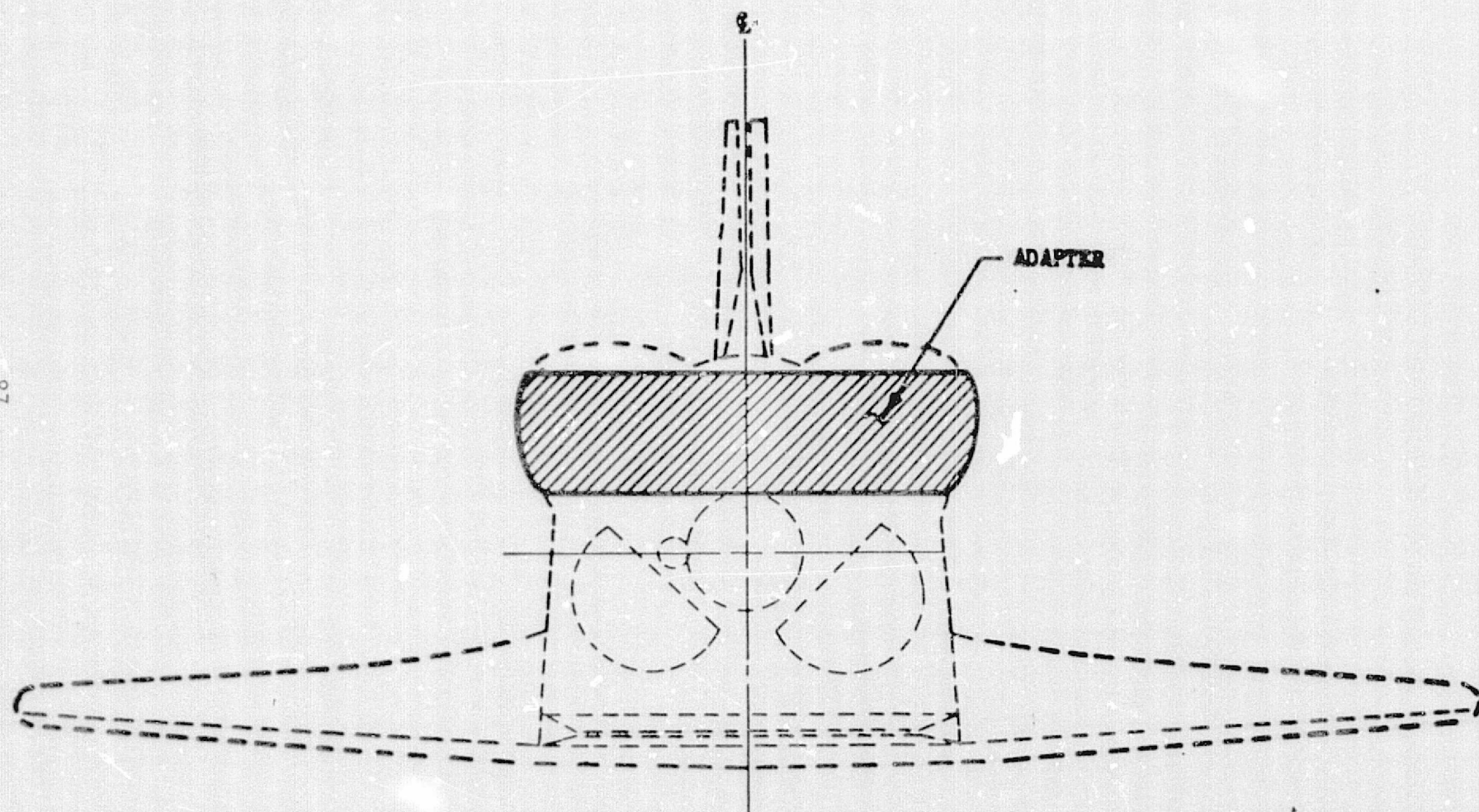
a. Orbiter Configuration

Figure 2. - Model sketches.



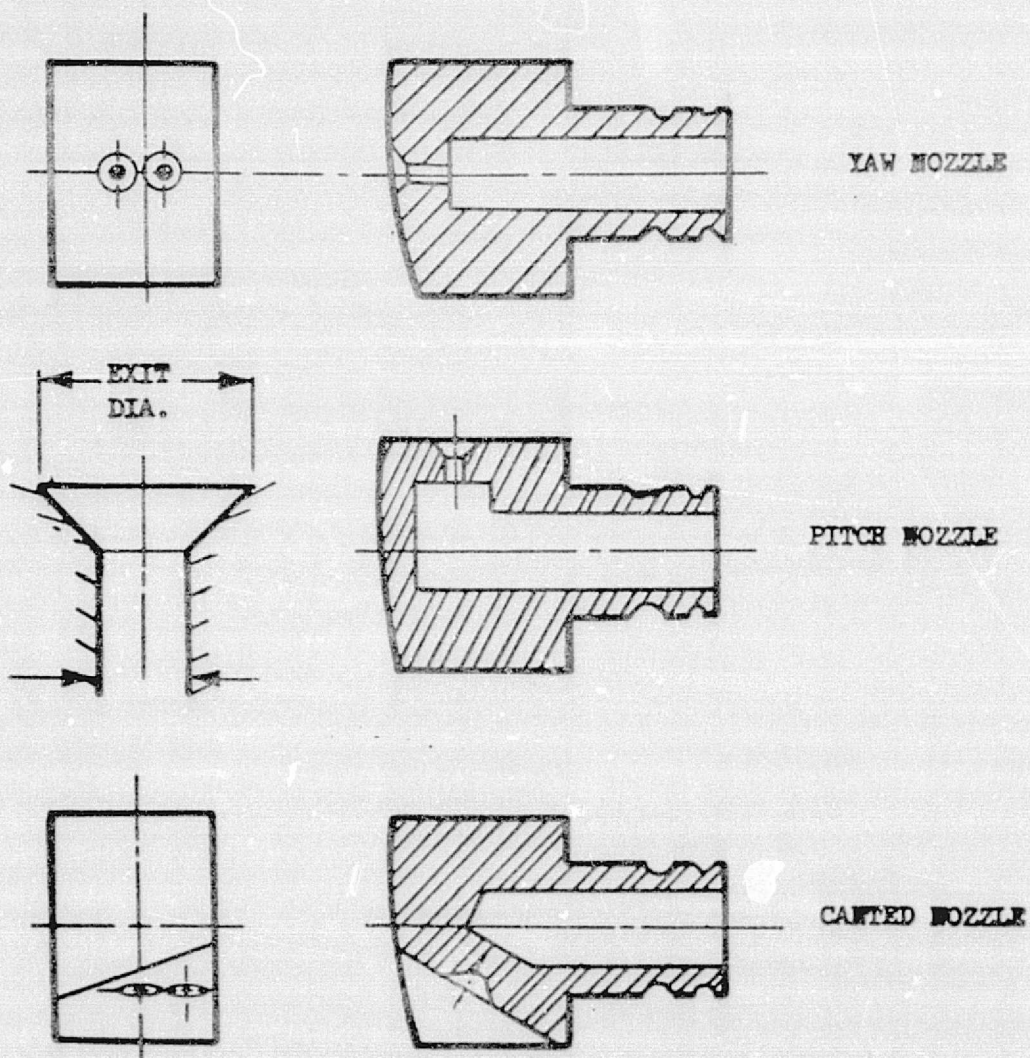
b. RCS Plenum Nozzle Block Installation

Figure 2. - Continued.



c. RCS Nozzle Adapter

Figure 2.- Continued.

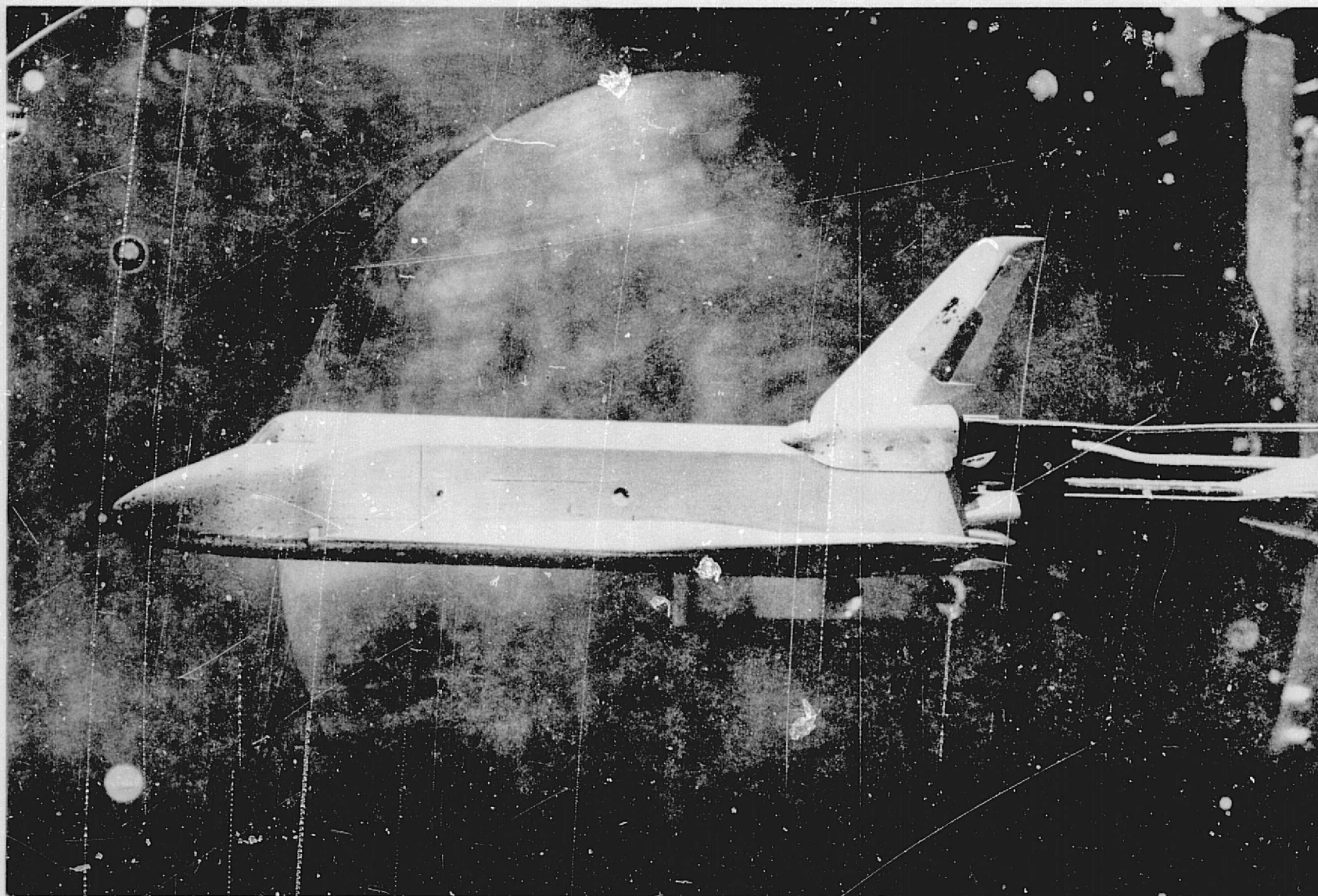


d. Model Nozzle Block Configurations

Figure 2. - Concluded.

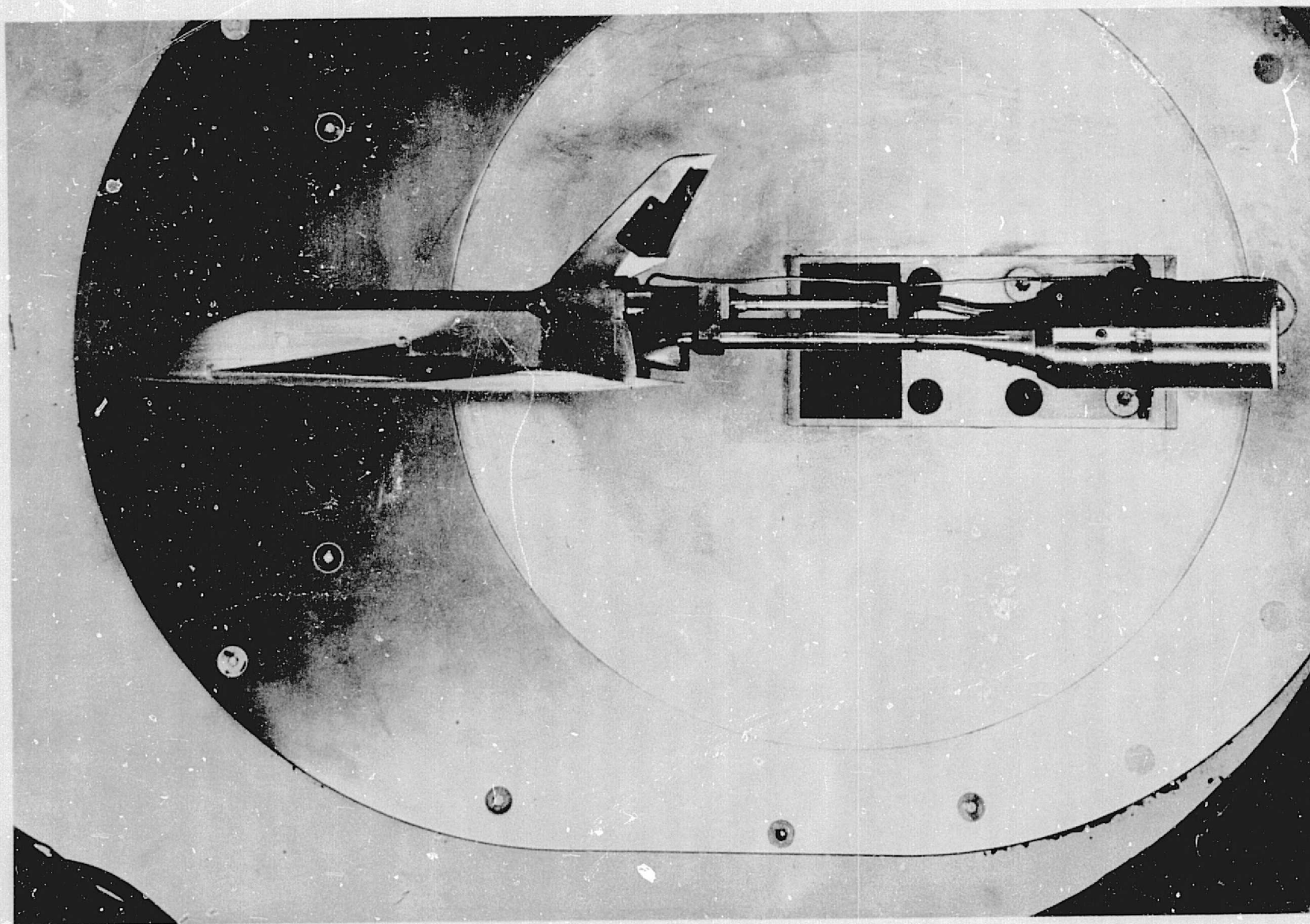
ORIGINAL PAGE IS
OF POOR QUALITY

89



a. Orbiter Installation Side View

Figure 3. - Model photographs.



b. Side View Of Nozzle Assembly Installed In Tunnel

Figure 3. - Concluded.

DATA FIGURES

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA020)	01N79N78 LARC CFHT 118 (MA-22)
(SJA035)	01N79N78 LARC CFHT 118 (MA-22)
(SJA046)	01N79N78 LARC CFHT 118 (MA-22)
(XJA009)	01N79N78 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BD FLAP	BETA	REFERENCE INFORMATION
.000	2.000	-14.250	.000	SREF 2690.0000 SQ. FT.
-30.000	2.000	.000	.000	LREF 474.8000 INCHES
-30.000	2.000	-14.250	.000	BREF 936.6800 INCHES
.000	2.000	.000	.000	XMRP 1076.7000 IN. X0
				YMRP .0000 IN. Y0
				ZMRP 375.0000 IN. Z0
				SCALE .0100

RCS JET AMPLIFICATION FACTOR - NORMAL FORCE, N(NF)

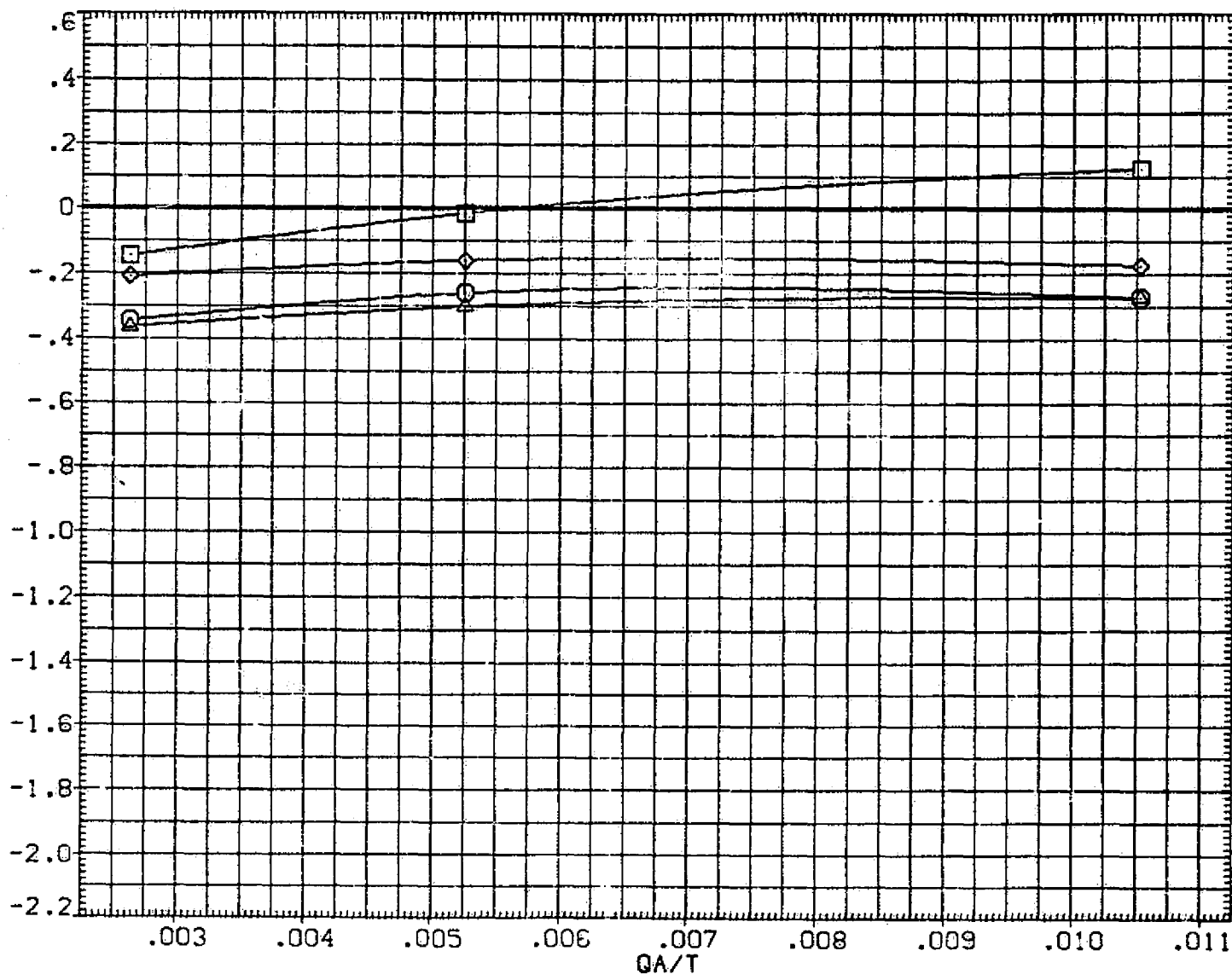


FIGURE 78. EFFECT OF ELEVON/BODY FLAP ON AMPLIFICATION FACTOR, JETS N79N78

(A) ALPHA = -8.00

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(SJA020)	□	01N79N78 LARC CFHT 118 (MA-22)
(SJA035)	□	01N79N78 LARC CFHT 118 (MA-22)
(SJA045)	△	01N79N78 LARC CFHT 118 (MA-22)
(XJA009)	△	01N79N78 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BD FLAP	BETA	REFERENCE INFORMATION		
.000	2.000	-14.250	.000	SREF	2690.0000	SQ. FT.
-30.000	2.000	.000	.000	LREF	474.8000	INCHES
-30.000	2.000	-14.250	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - NORMAL FORCE, N(NF)

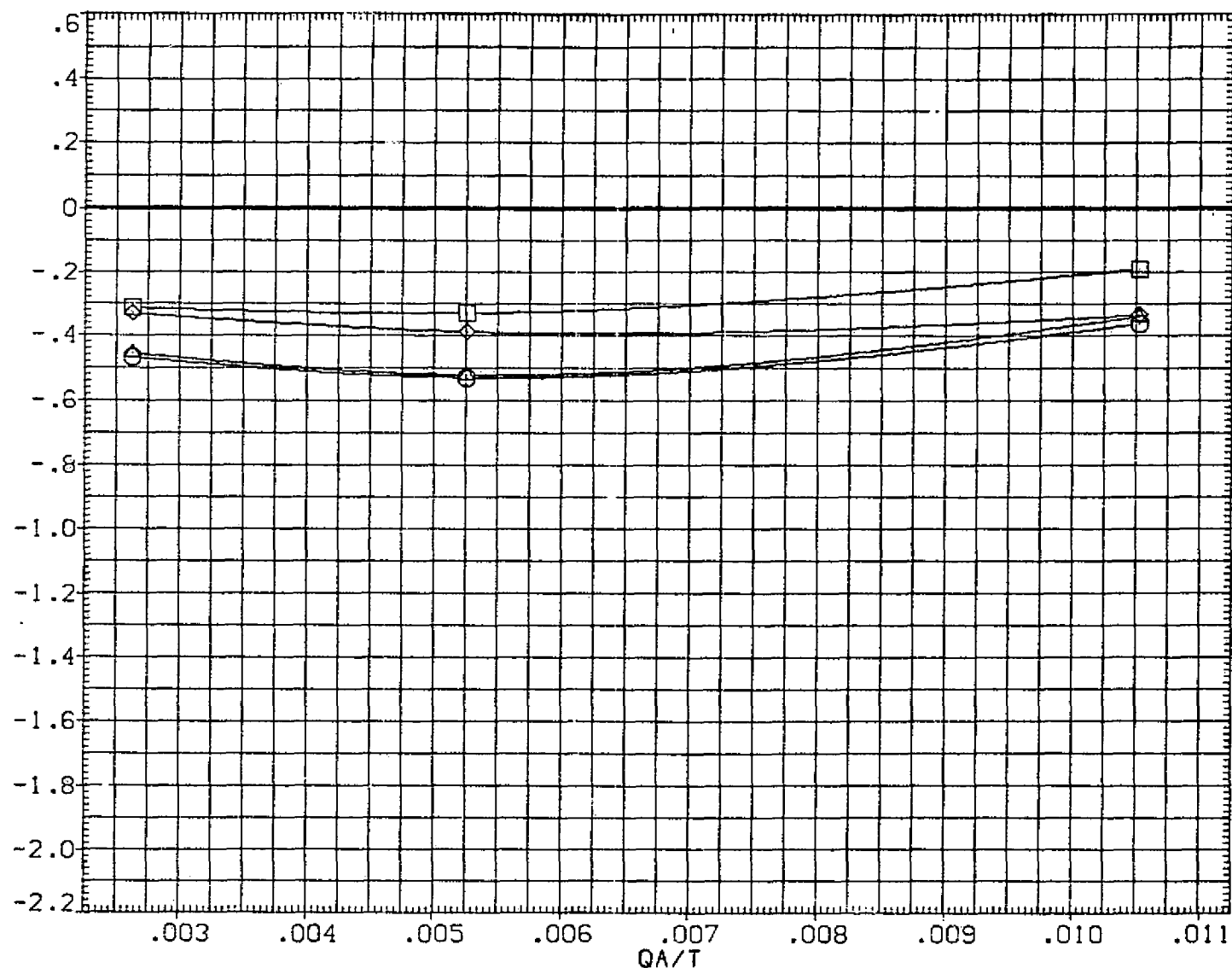


FIGURE 78. EFFECT OF ELEVON/BODY FLAP ON AMPLIFICATION FACTOR, JETS N79N78
(B) ALPHA = .00

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION
(SJA020)	○	01N79N78 LARC CFHT 118 (MA-22)
(SJA035)	□	01N79N78 LARC CFHT 118 (MA-22)
(SJA046)	◇	01N79N78 LARC CFHT 118 (MA-22)
(XJA009)	△	01N79N78 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BDFLAP	BETA
.000	2.000	-14.250	.000
-30.000	2.000	.000	.000
-30.000	2.000	-14.250	.000
.000	2.000	.000	.000

REFERENCE INFORMATION		
SREF	2690.0000	50. FT.
LREF	474.8000	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0100	

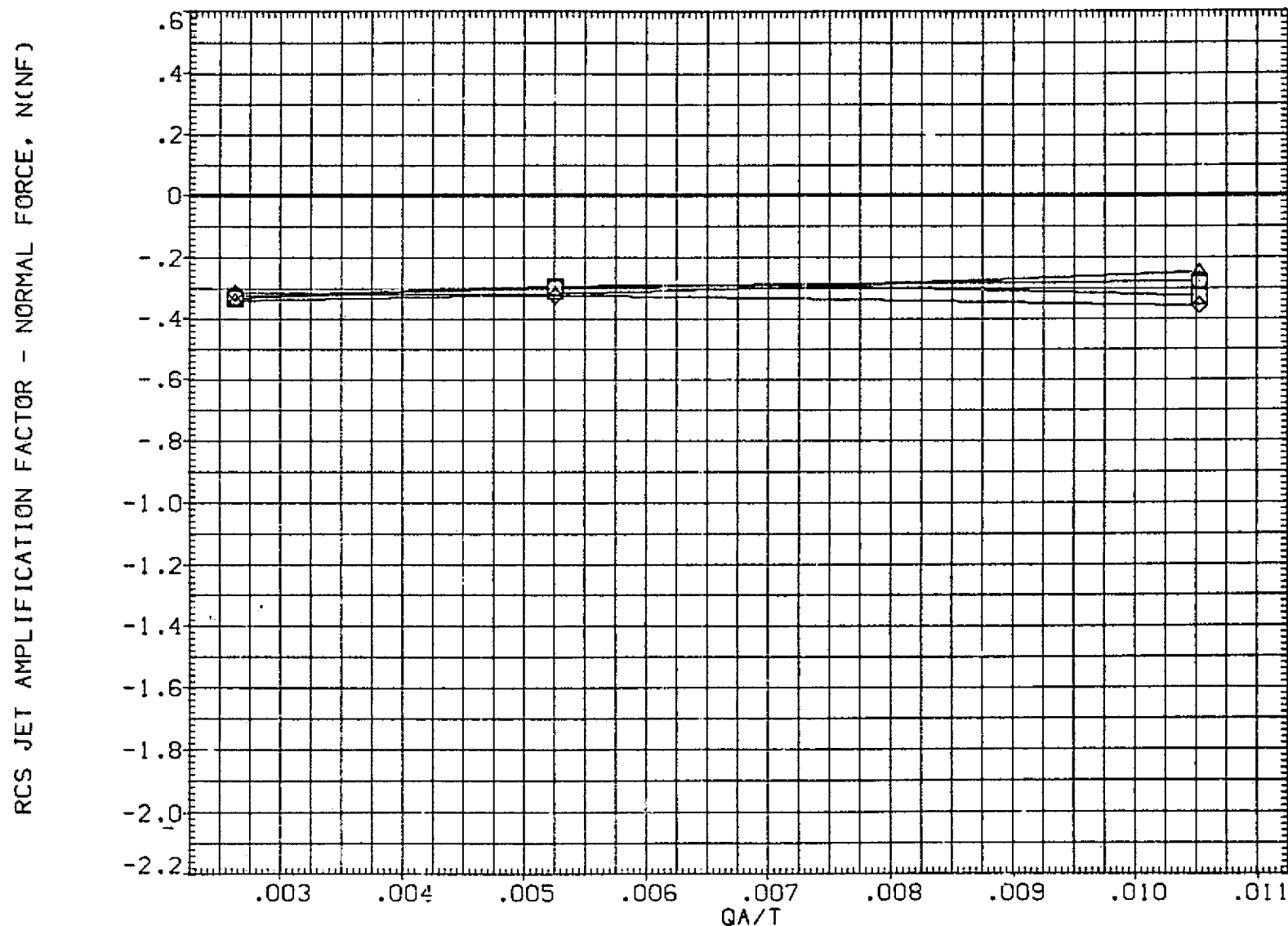


FIGURE 78. EFFECT OF ELEVON/BODY FLAP ON AMPLIFICATION FACTOR, JETS N79N78

(C) ALPHA = 10.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA020)	01N79N78 LARC CFHT 118 (MA-22)
(SJA035)	01N79N78 LARC CFHT 118 (MA-22)
(SJA046)	01N79N78 LARC CFHT 118 (MA-22)
(XJA009)	01N79N78 LARC CFHT 118 (MA-22)

ELEVON	NJ.JET	BDFLAP	BETA	REFERENCE INFORMATION		
.000	2.000	-14.250	.000	SREF	2690.0000	50. FT.
-30.000	2.000	.000	.000	LREF	474.8000	INCHES
-30.000	2.000	-14.250	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - NORMAL FORCE, N(NF)

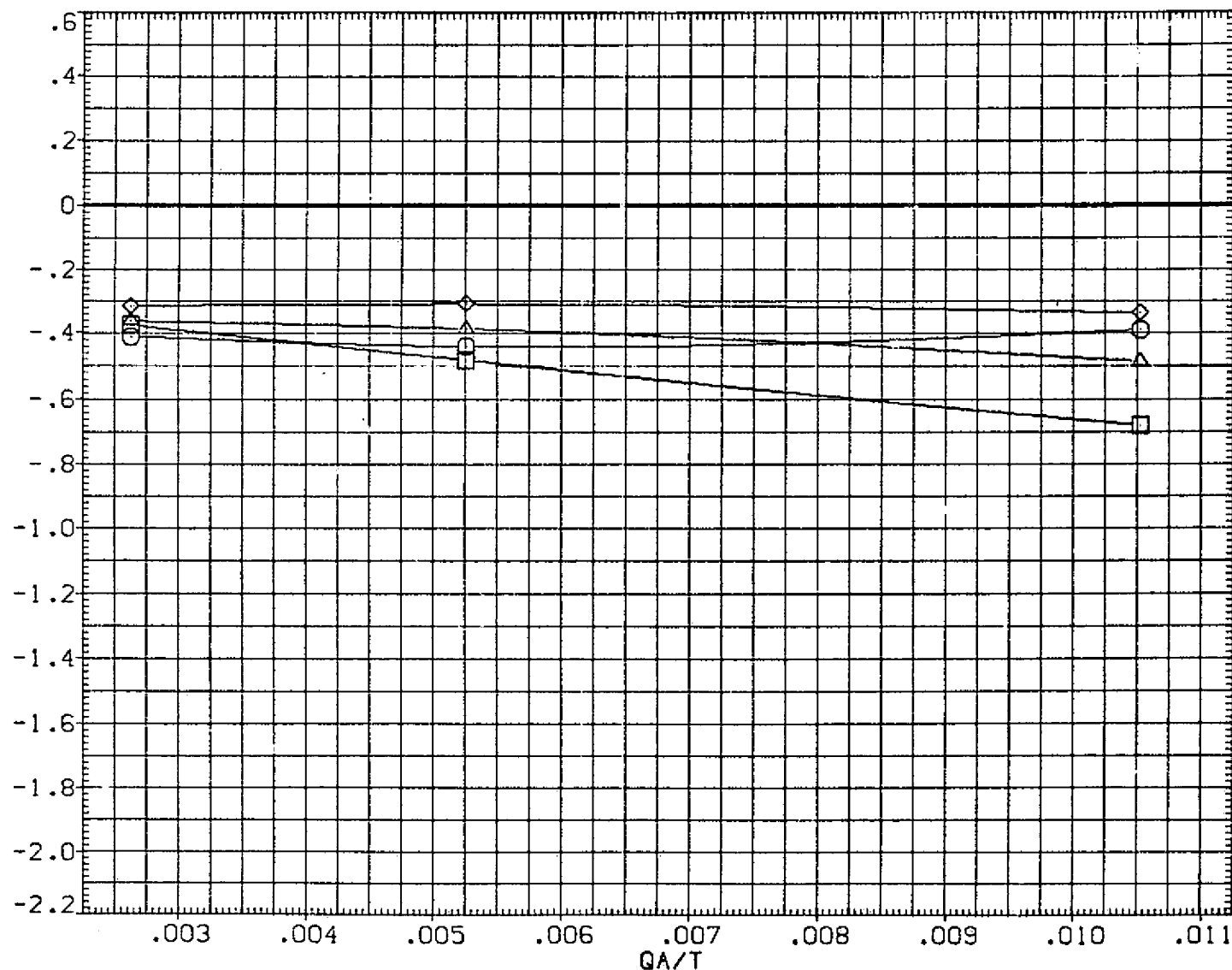


FIGURE 78. EFFECT OF ELEVON/BODY FLAP ON AMPLIFICATION FACTOR, JETS N79N78

(D) ALPHA = 20.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA020)	01N79N78 LARC CFHT 118 (MA-22)
(SJA035)	01N79N78 LARC CFHT 118 (MA-22)
(SJA046)	01N79N78 LARC CFHT 118 (MA-22)
(XJA009)	01N79N78 LARC CFHT 118 (MA-22)

ELEVON	NO.JET	BDFLAP	BETA	REFERENCE INFORMATION		
.000	2.000	-14.250	.000	SREF	2690.0000	SQ.FT.
-30.000	2.000	.000	.000	LREF	474.8000	INCHES
-30.000	2.000	-14.250	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - NORMAL FORCE, N(NF)

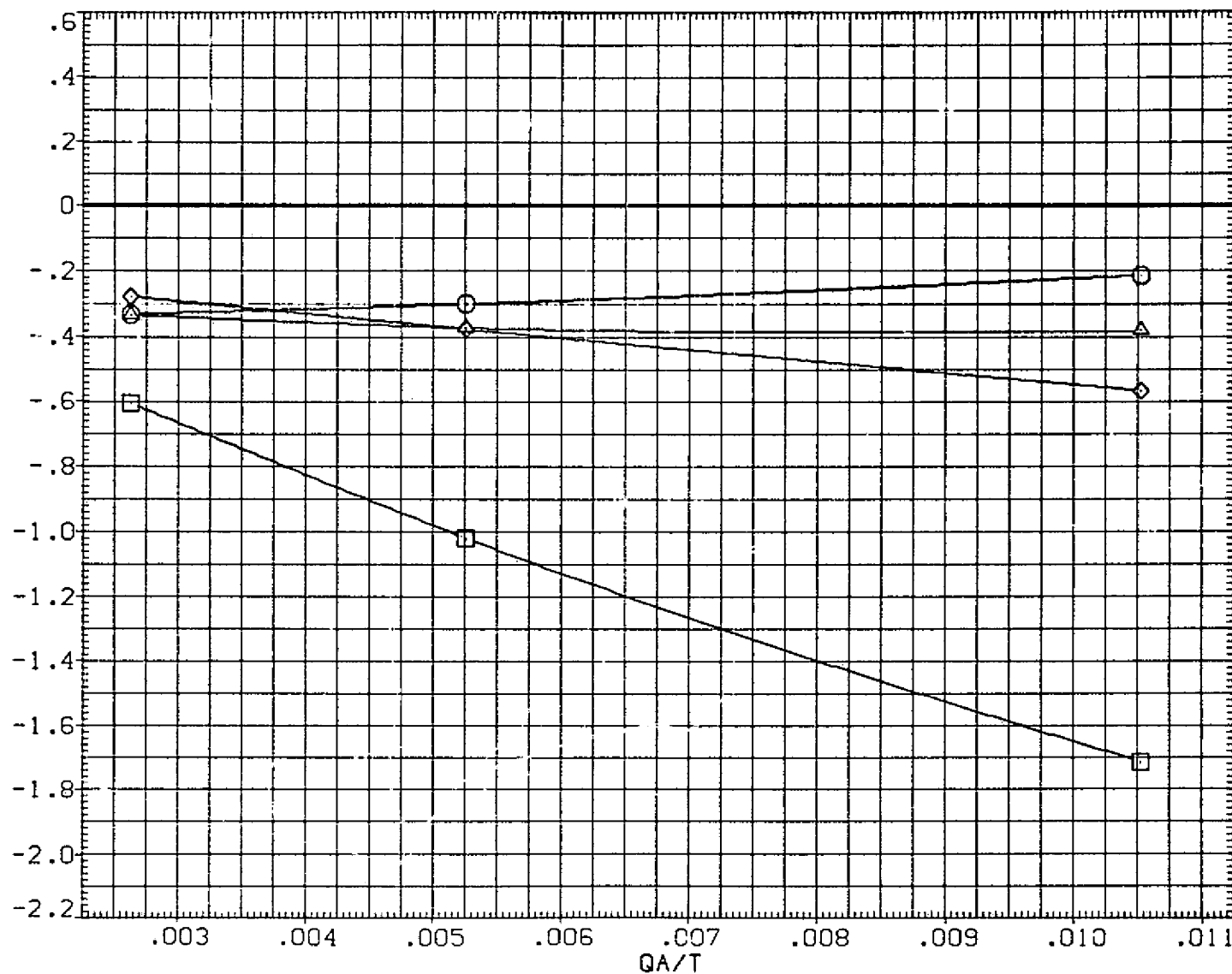


FIGURE 78. EFFECT OF ELEVON/BODY FLAP ON AMPLIFICATION FACTOR, JETS N79N78
(E) ALPHA = 35.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA020)	□ 01N79N78 LARC CFHT 118 (MA-22)
(SJA035)	◇ 01N79N78 LARC CFHT 118 (MA-22)
(SJA046)	◇ 01N79N78 LARC CFHT 118 (MA-22)
(XJA009)	△ 01N79N78 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BOFLAP	BETA	REFERENCE INFORMATION		
.000	2.000	-14.250	.000	SREF	2690.0000	50. FT.
-30.000	2.000	.000	.000	LREF	474.8000	INCHES
-30.000	2.000	-14.250	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - PITCH, N(PM)

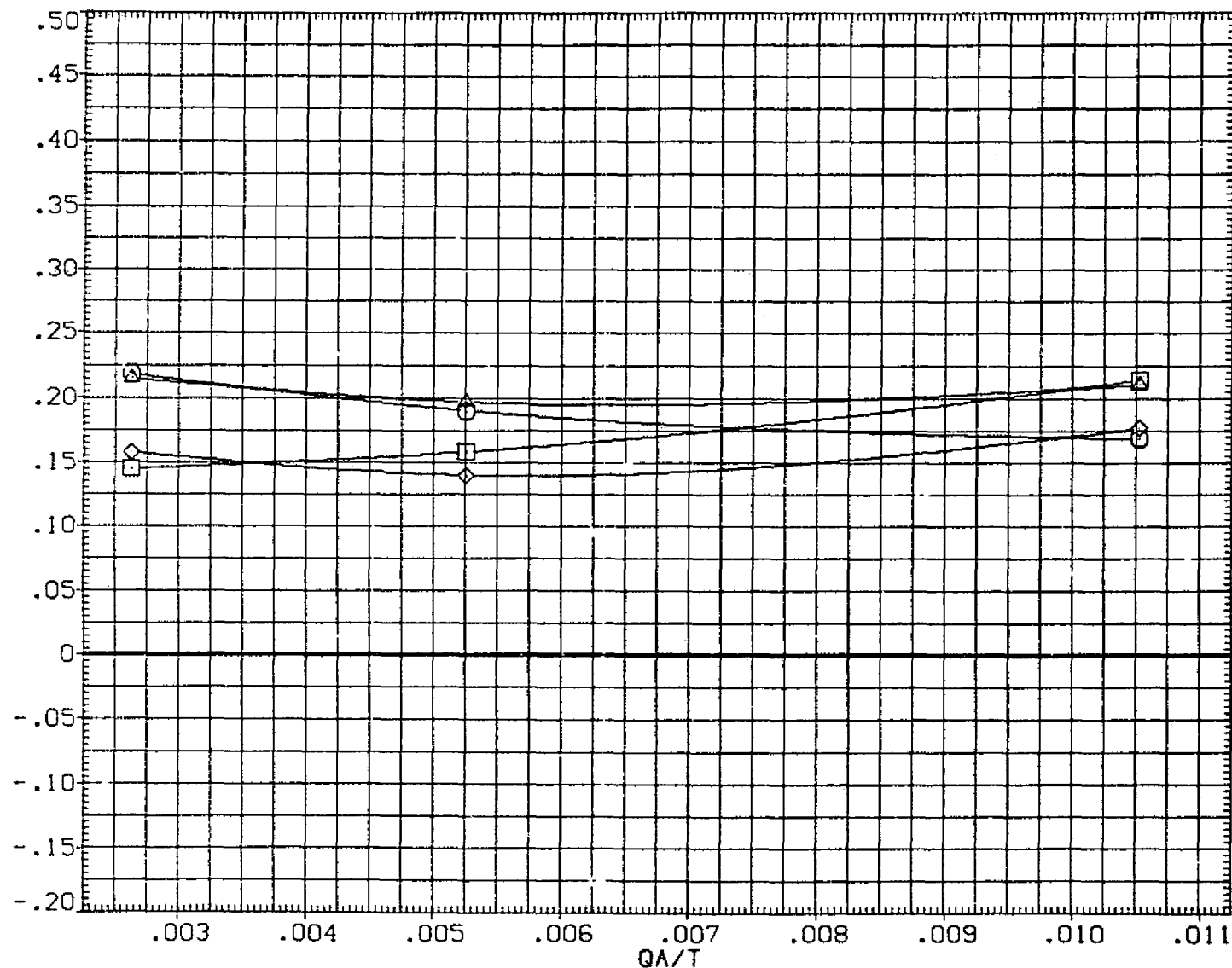


FIGURE 78. EFFECT OF ELEVON/BODY FLAP ON AMPLIFICATION FACTOR, JETS N79N78

(A) ALPHA = -8.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA020) ○	01N79N78 LARC CFHT 118 (MA-22)
(SJA035) □	01N79N78 LARC CFHT 118 (MA-22)
(SJA046) ◇	01N79N78 LARC CFHT 118 (MA-22)
(XJA009) △	01N79N78 LARC CFHT 118 (MA-22)

ELEVON	NO.JET	BDFLAP	BETA	REFERENCE INFORMATION
.000	2.000	-14.250	.000	SREF 2690.0000 SQ.FT.
-30.000	2.000	.000	.000	LREF 474.8000 INCHES
-30.000	2.000	-14.250	.000	BREF 936.6800 INCHES
.000	2.000	.000	.000	XMRP 1076.7000 IN. X0
				YMRP .0000 IN. Y0
				ZMRP 375.0000 IN. Z0
				SCALE .0100

RCS JET AMPLIFICATION FACTOR - PITCH, NCPM)

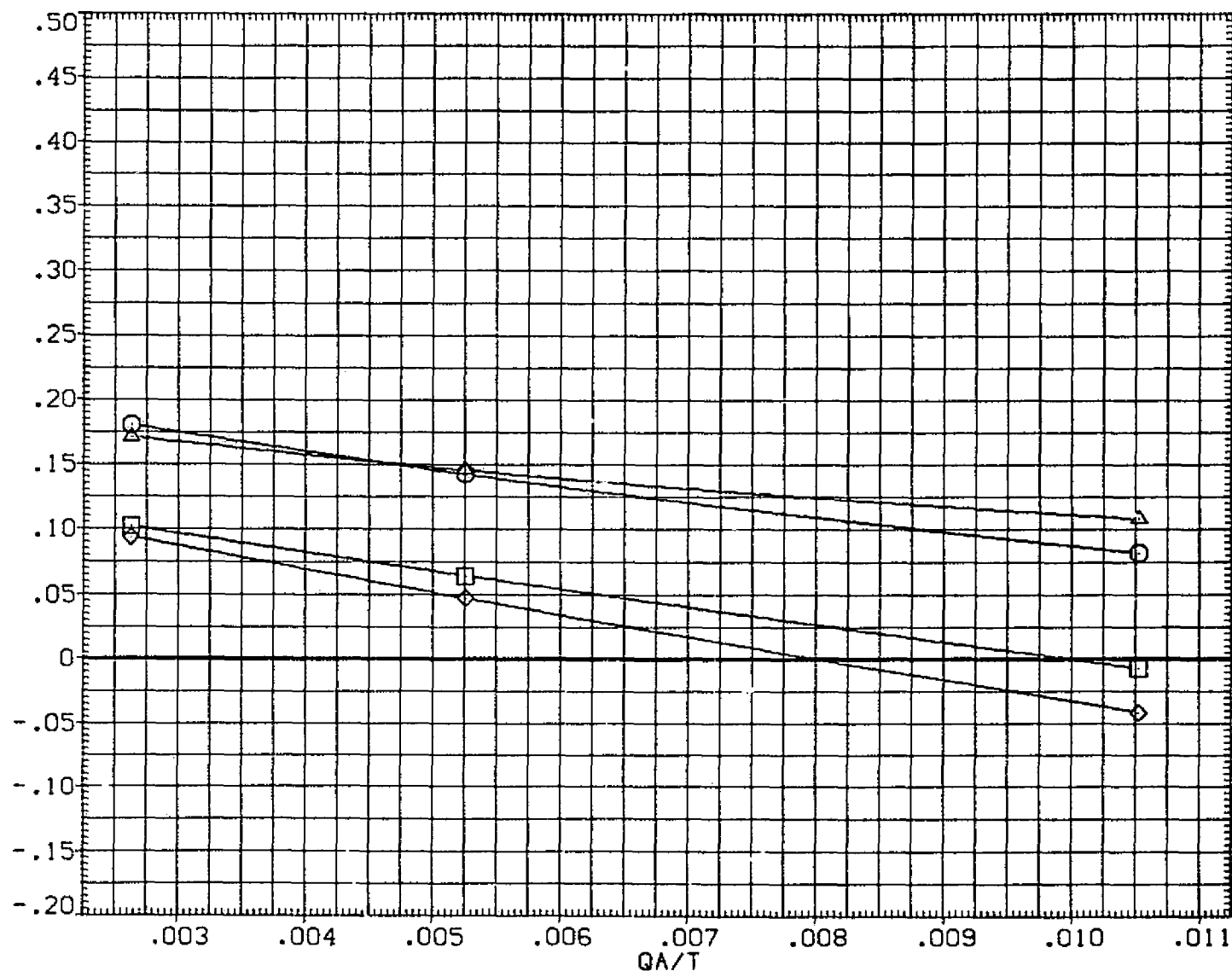


FIGURE 78. EFFECT OF ELEVON/BODY FLAP ON AMPLIFICATION FACTOR, JETS N79N78

(B) ALPHA = .00

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION
(SJA020)	○	01N79N78 LARC CFHT 118 (MA-22)
(SJA035)	□	01N79N78 LARC CFHT 118 (MA-22)
(SJA046)	◇	01N79N78 LARC CFHT 118 (MA-22)
(XJA009)	△	01N79N78 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BO FLAP	BETA	REFERENCE INFORMATION		
.000	2.000	-14.250	.000	SREF	2690.0000	50. FT.
-30.000	2.000	.000	.000	LREF	474.8000	INCHES
-30.000	2.000	-14.250	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - PITCH, N(PM)

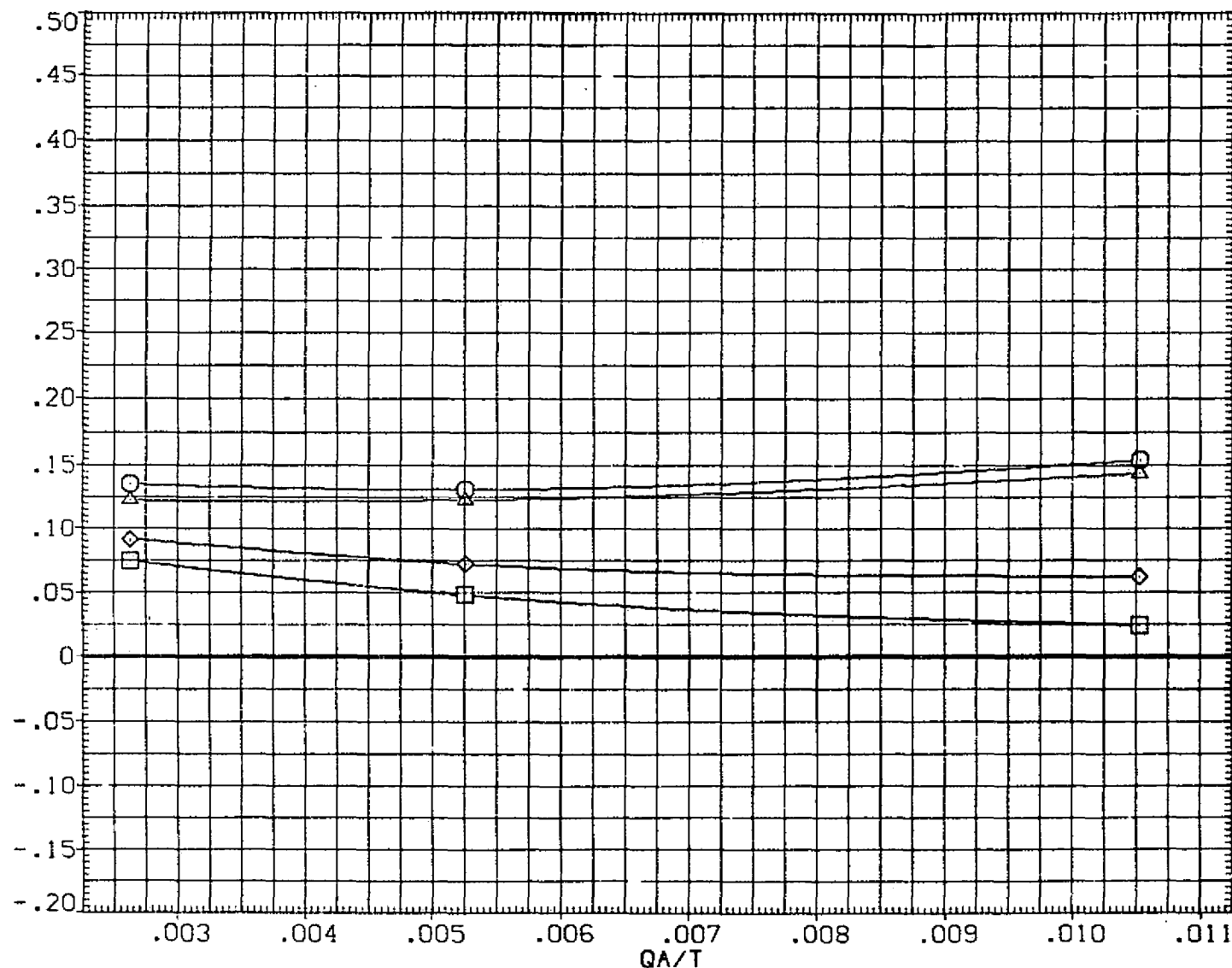


FIGURE 78. EFFECT OF ELEVON/BODY FLAP ON AMPLIFICATION FACTOR, JETS N79N78

(C) ALPHA = 10.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA020)	□ 01N79N78 LARC CFHT 118 (MA-22)
(SJA035)	◇ 01N79N78 LARC CFHT 118 (MA-22)
(SJA046)	△ 01N79N78 LARC CFHT 118 (MA-22)
(XJA009)	△ 01N79N78 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BD FLAP	BETA	REFERENCE INFORMATION		
.000	2.000	-14.250	.000	SREF	2690.0000	50. FT.
-30.000	2.000	.000	.000	LREF	474.8000	INCHES
-30.000	2.000	-14.250	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - PITCH, N(PM)

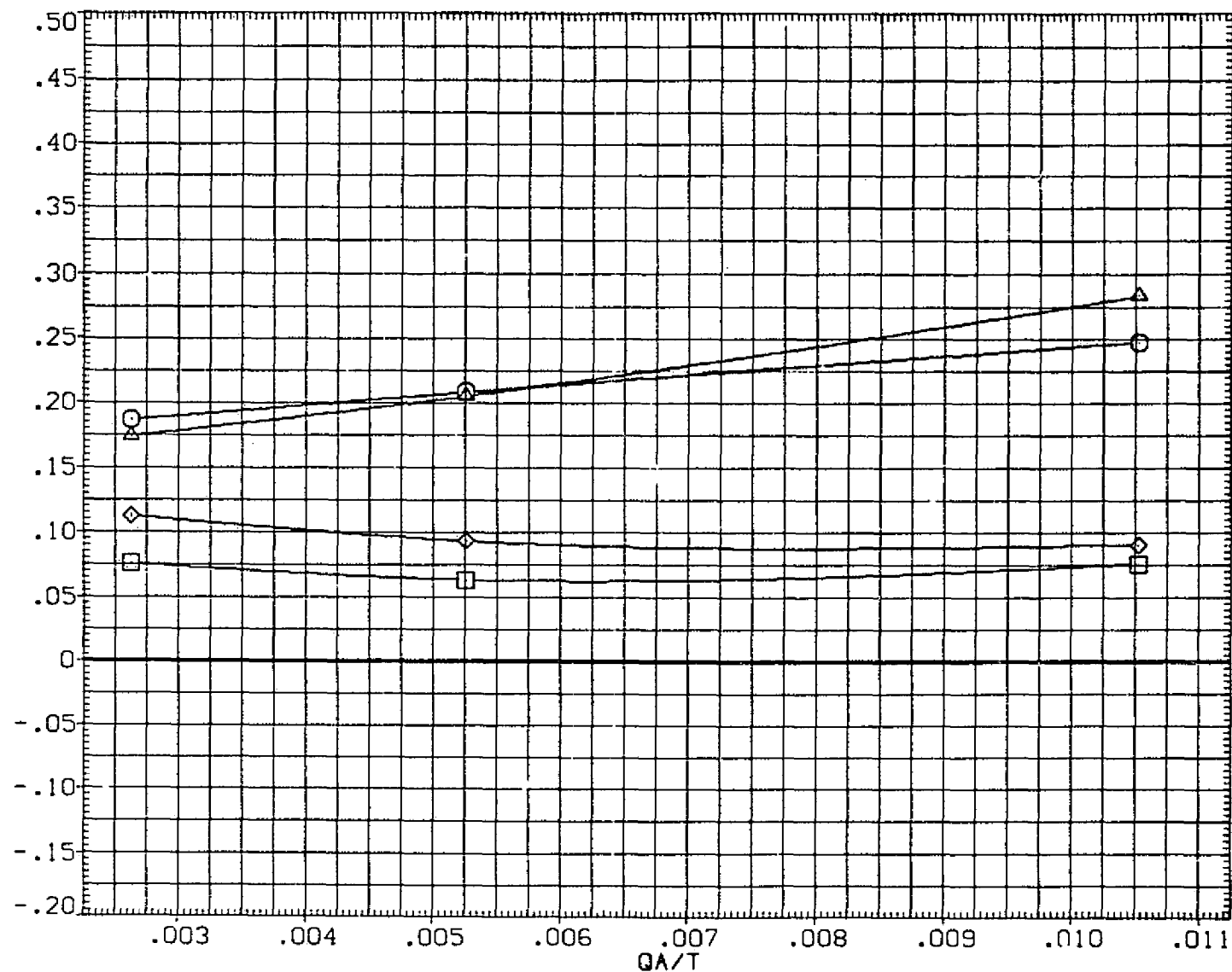


FIGURE 78. EFFECT OF ELEVON/BODY FLAP ON AMPLIFICATION FACTOR, JETS N79N78

(D) ALPHA = 20.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA020)	□ 01N79N78 LARC CFHT 118 (MA-22)
(SJA035)	○ 01N79N78 LARC CFHT 118 (MA-22)
(SJA046)	△ 01N79N78 LARC CFHT 118 (MA-22)
(XJA009)	◇ 01N79N78 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BDFLAP	BETA	REFERENCE INFORMATION
.000	2.000	-14.250	.000	SREF 2690.0000 SQ. FT.
-30.000	2.000	.000	.000	LREF 474.8000 INCHES
-30.000	2.000	-14.250	.000	BREF 936.6300 INCHES
.000	2.000	.000	.000	XMRP 1076.7000 IN. X0
				YMRP .0000 IN. Y0
				ZMRP 375.0000 IN. Z0
				SCALE .0100

RCS JET AMPLIFICATION FACTOR - PITCH, NCPM

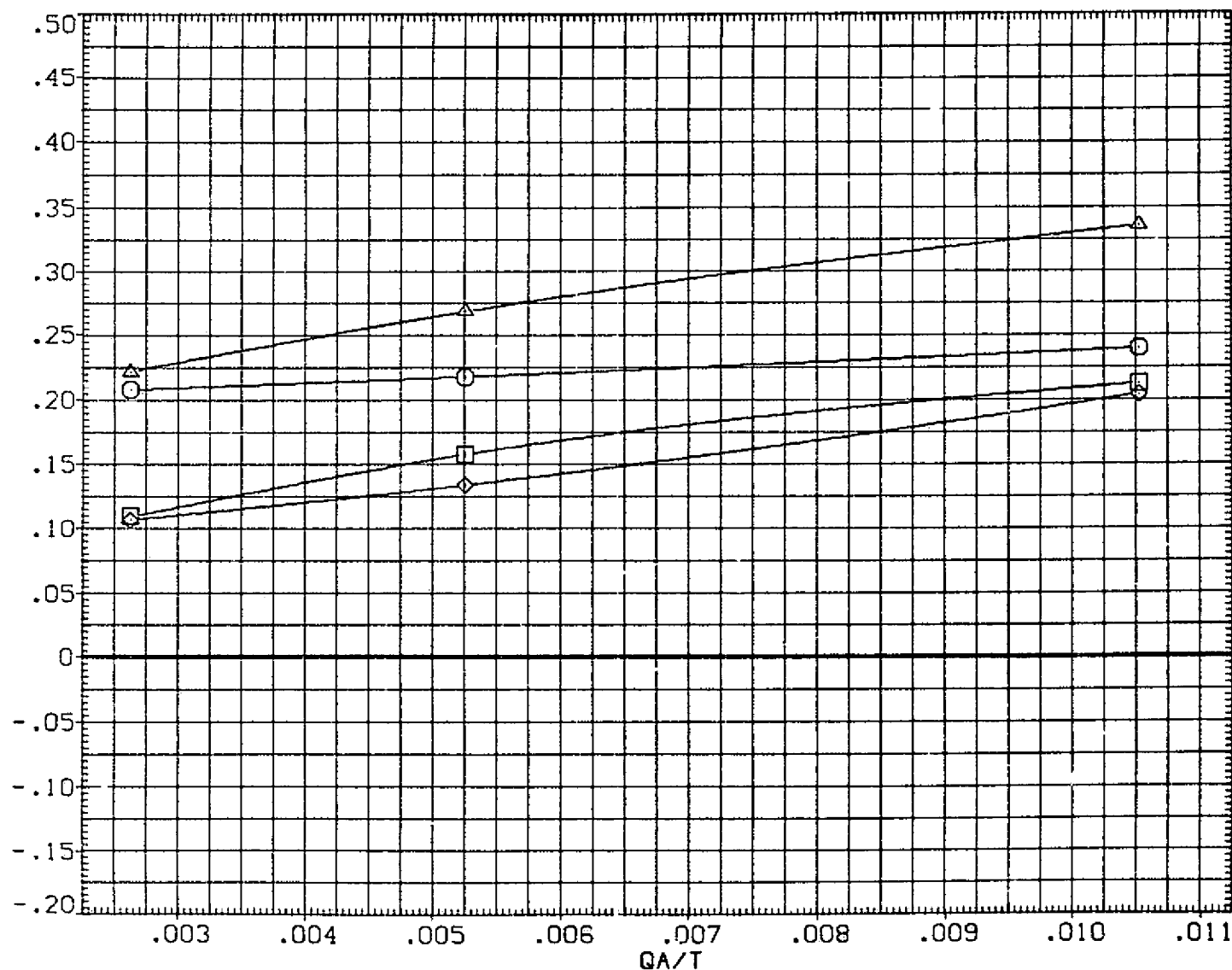


FIGURE 78. EFFECT OF ELEVON/BODY FLAP ON AMPLIFICATION FACTOR, JETS N79N78

(E) ALPHA = 35.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA020)	01N79N78 LARC CFHT 118 (MA-22)
(SJA035)	01N79N78 LARC CFHT 118 (MA-22)
(SJA046)	01N79N78 LARC CFHT 118 (MA-22)
(XJA009)	01N79N78 LARC CFHT 118 (MA-22)

ELEVON	NJ.JET	BDFLAP	BETA	REFERENCE INFORMATION
.000	2.000	-14.250	.000	SREF 2690.0000 SQ.FT.
-30.000	2.000	.000	.000	LREF 474.8000 INCHES
-30.000	2.000	-14.250	.000	BREF 936.6800 INCHES
.000	2.000	.000	.000	XMRP 1076.7000 IN. X0
				YMRP .0000 IN. Y0
				ZMRP 375.0000 IN. Z0
				SCALE .0100

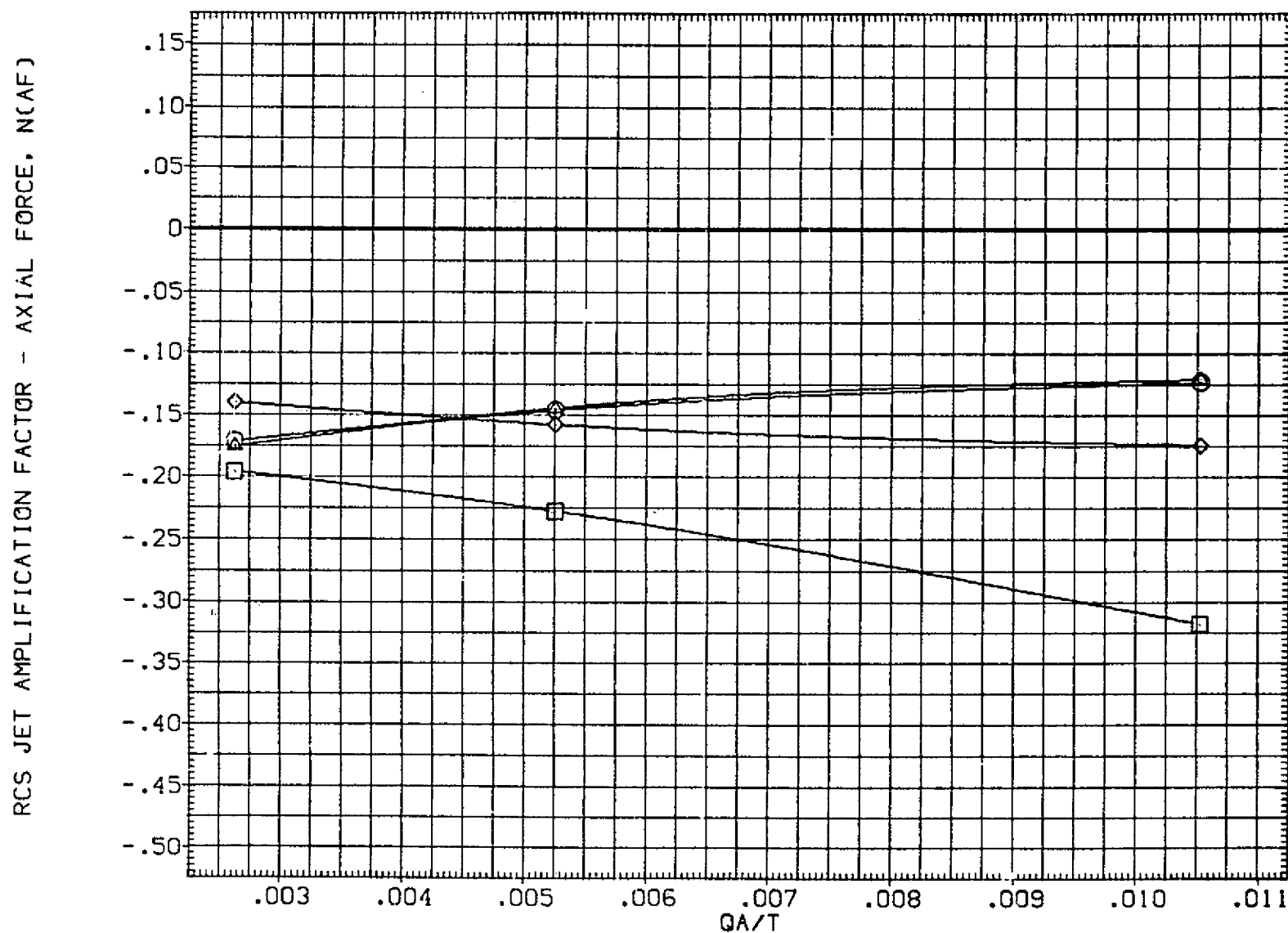


FIGURE 78. EFFECT OF ELEVON/BODY FLAP ON AMPLIFICATION FACTOR, JETS N79N78

(A) ALPHA = -8.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA020)	01N79N78 LARC CFHT 118 (MA-22)
(SJA035)	01N79N78 LARC CFHT 118 (MA-22)
(SJA046)	01N79N78 LARC CFHT 118 (MA-22)
(XJA009)	01N79N78 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BDFLAP	BETA	REFERENCE INFORMATION	
.000	2.000	-14.250	.000	SREF	2690.0000 SQ. FT.
-30.000	2.000	.000	.000	LREF	474.8000 INCHES
-30.000	2.000	-14.250	.000	BREF	936.6800 INCHES
.000	2.000	.000	.000	XMRP	1076.7000 IN. X0
				YMRP	.0000 IN. Y0
				ZMRP	375.0000 IN. Z0
				SCALE	.0100

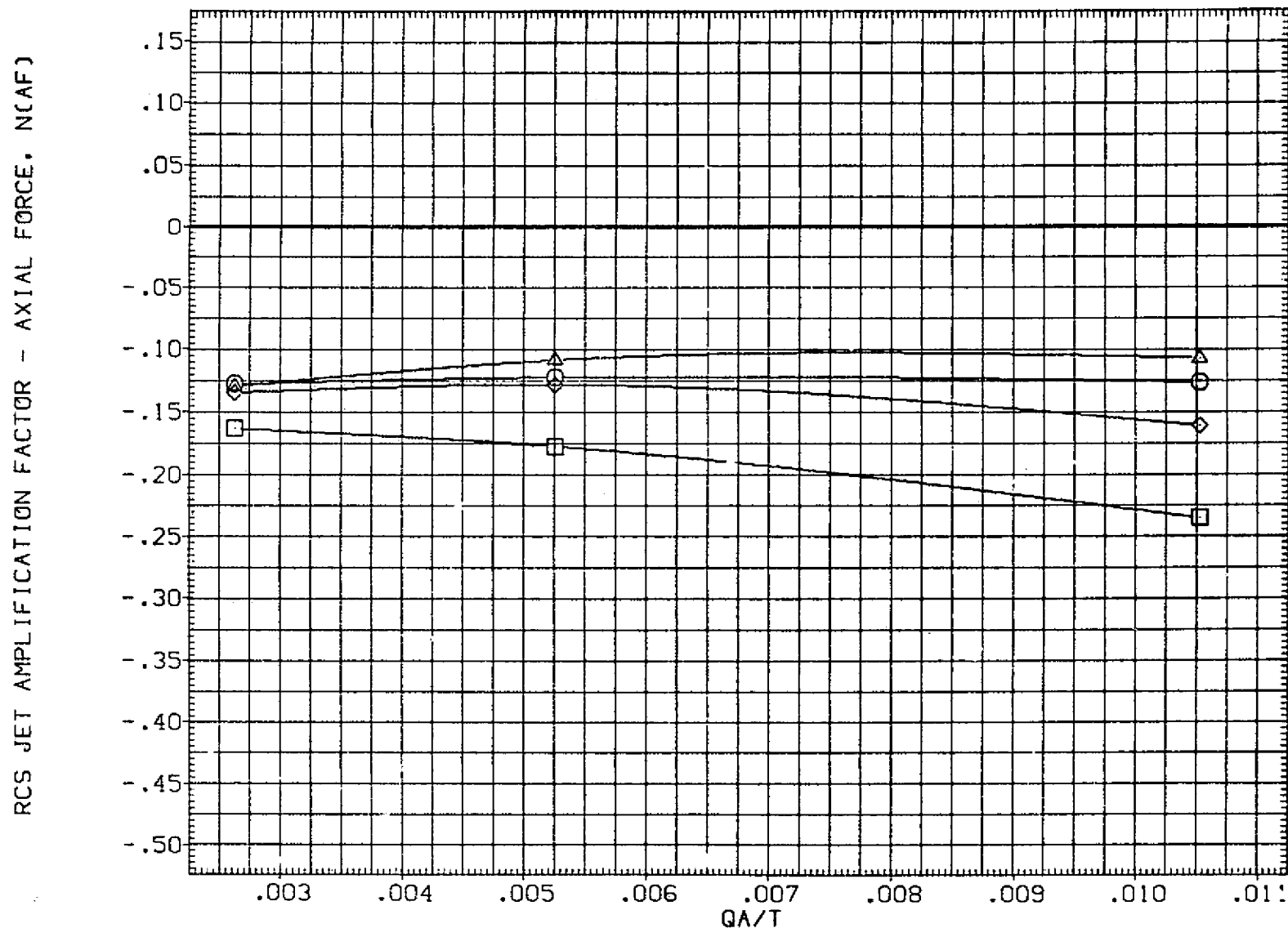


FIGURE 78. EFFECT OF ELEVON/BODY FLAP ON AMPLIFICATION FACTOR, JETS N79N78

(B) ALPHA = .00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA020)	01N79N78 LARC CFHT 118 (MA-22)
(SJA035)	01N79N78 LARC CFHT 118 (MA-22)
(SJA046)	01N79N78 LARC CFHT 118 (MA-22)
(XJA009)	01N79N78 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BDFLAP	BETA	REFERENCE INFORMATION		
.000	2.000	-14.250	.000	SREF	2690.0000	SQ. FT.
-30.000	2.000	.000	.000	LREF	474.8000	INCHES
-30.000	2.000	-14.250	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.0100	

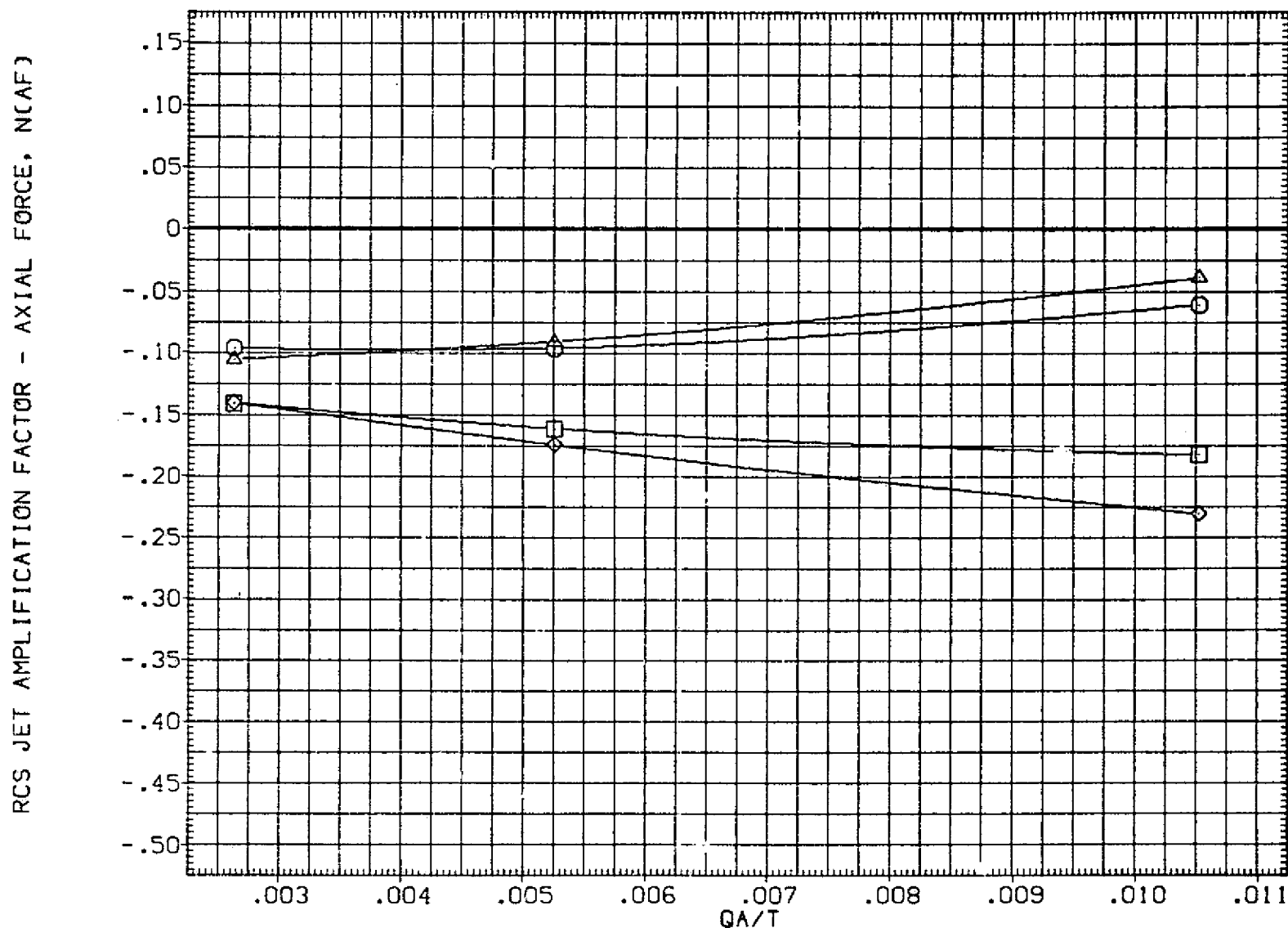


FIGURE 78. EFFECT OF ELEVON/BODY FLAP ON AMPLIFICATION FACTOR, JETS N79N78

(C) ALPHA = 10.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA020)	01N79N78 LARC CFHT 118 (MA-22)
(SJA035)	01N79N78 LARC CFHT 118 (MA-22)
(SJA046)	01N79N78 LARC CFHT 118 (MA-22)
(XJA009)	01N79N78 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BD FLAP	BETA	REFERENCE INFORMATION		
.000	2.000	-14.250	.000	SREF	2690.0000	50. FT.
-30.000	2.000	.000	.000	LREF	474.8000	INCHES
-30.000	2.000	-14.250	.000	BREF	936.6900	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.0100	

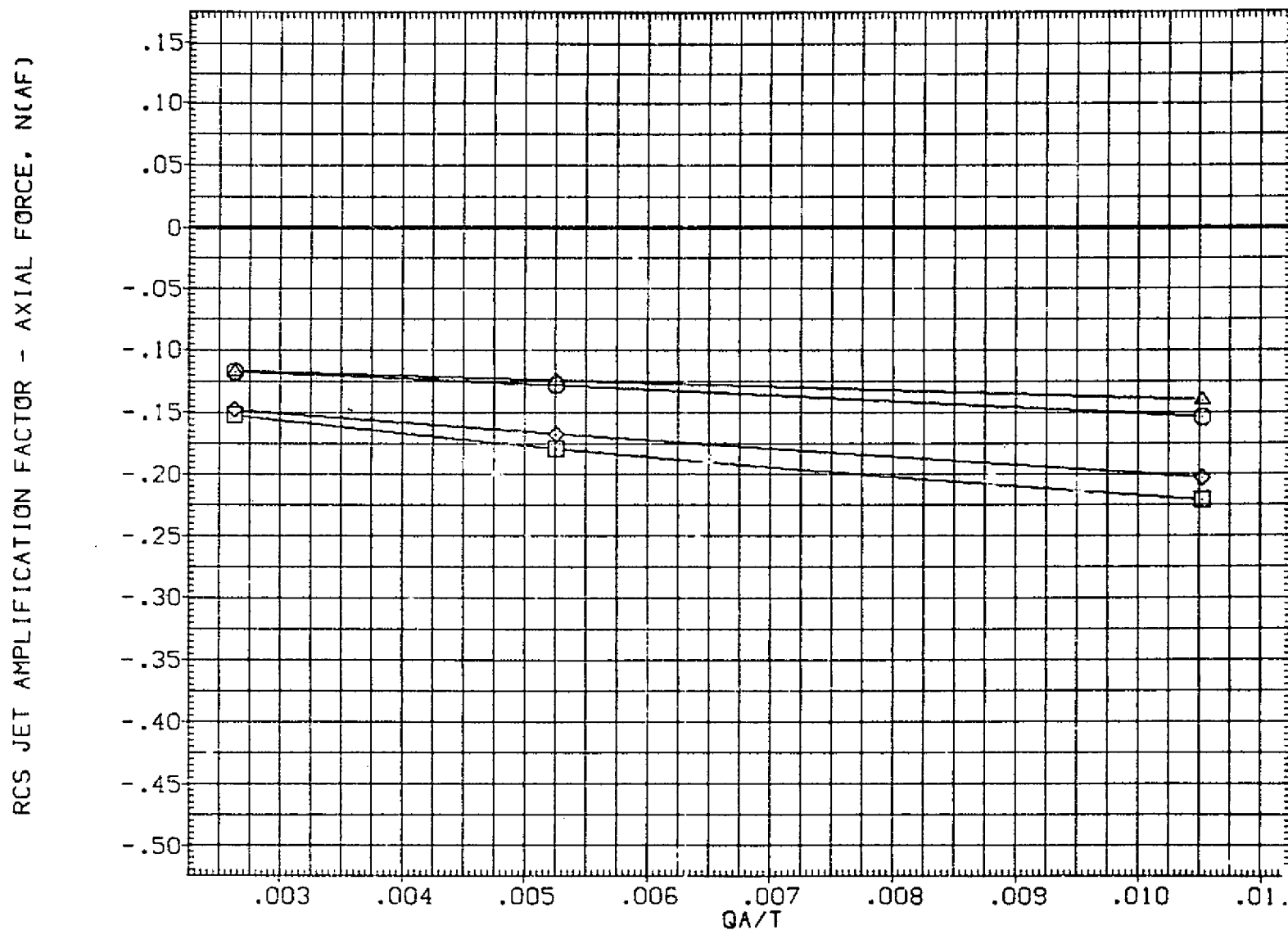


FIGURE 78. EFFECT OF ELEVON/BODY FLAP ON AMPLIFICATION FACTOR, JETS N79N78

(D) ALPHA = 20.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA020)	01N79N78 LARC CFHT 118 (MA-22)
(SJA035)	01N79N78 LARC CFHT 118 (MA-22)
(SJA046)	01N79N78 LARC CFHT 118 (MA-22)
(XJA009)	01N79N78 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BD FLAP	BETA
.000	2.000	-14.250	.000
-30.000	2.000	.000	.000
-30.000	2.000	-14.250	.000
.000	2.000	.000	.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ. FT.
LREF	474.8000	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - AXIAL FORCE, N(AF)

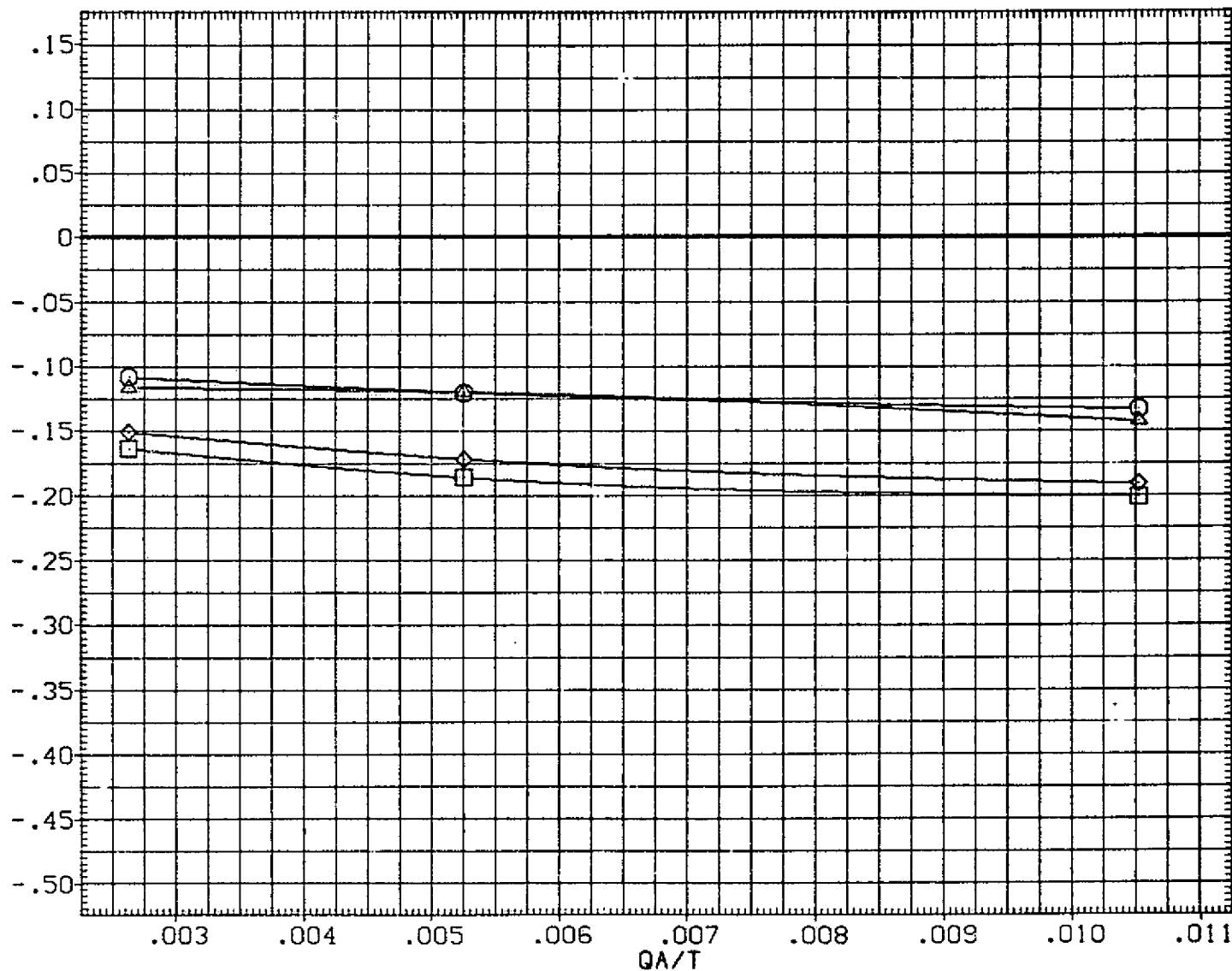


FIGURE 78. EFFECT OF ELEVON/BODY FLAP ON AMPLIFICATION FACTOR, JETS N79N78
(E) ALPHA = 35.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA020)	01N79N78 LARC CFHT 118 (MA-22)
(SJA035)	01N79N78 LARC CFHT 118 (MA-22)
(SJA046)	01N79N78 LARC CFHT 118 (MA-22)
(XJA009)	01N79N78 LARC CFHT 118 (MA-22)

ELEVON	NO. JFT	BDFLAP	BETA	REFERENCE INFORMATION		
.000	2.000	-14.250	.000	SREF	2690.0000	SQ. FT.
-30.000	2.000	.000	.000	LREF	474.8000	INCHES
-30.000	2.000	-14.250	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.0100	

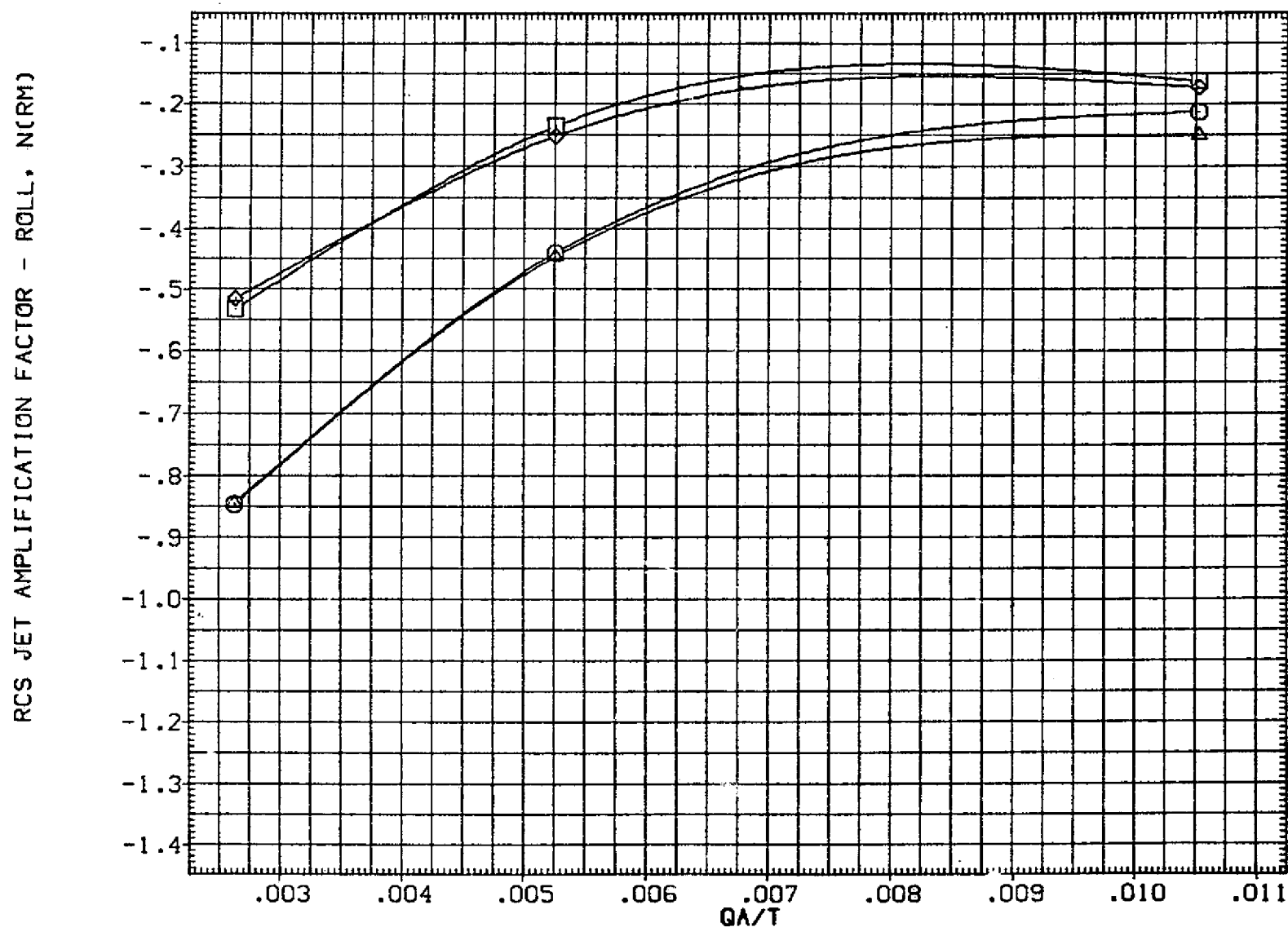


FIGURE 78. EFFECT OF ELEVON/BODY FLAP ON AMPLIFICATION FACTOR, JETS N79N78

(A) ALPHA = -8.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA020) ○	01N79N78 LARC CFHT 118 (MA-22)
(SJA035) □	01N79N78 LARC CFHT 118 (MA-22)
(SJA046) ◇	01N79N78 LARC CFHT 118 (MA-22)
(XJA009) △	01N79N78 LARC CFHT 118 (MA-22)

ELEVON	NO.JET	BDFLAP	BETA	REFERENCE INFORMATION		
.000	2.000	-14.250	.000	SREF	2690.0000	SQ.FT.
-30.000	2.000	.000	.000	LREF	474.8000	INCHES
-30.000	2.000	-14.250	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - ROLL, NCRM)

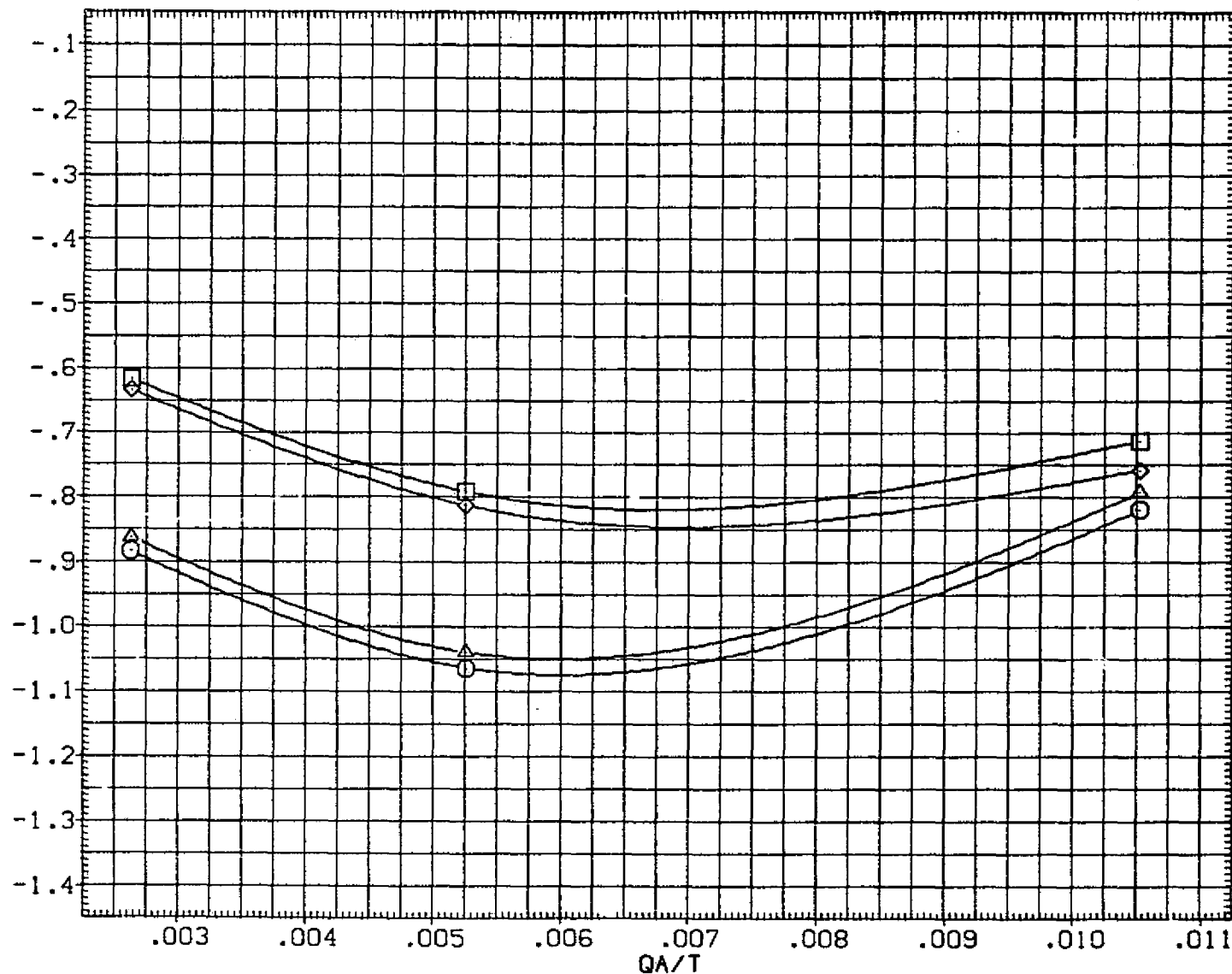


FIGURE 78. EFFECT OF ELEVON/BODY FLAP ON AMPLIFICATION FACTOR, JETS N79N78
(B) ALPHA = .00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA020)	Q1N79N78 LARC CFHT 118 (MA-22)
(SJA035)	Q1N79N78 LARC CFHT 118 (MA-22)
(SJA046)	Q1N79N78 LARC CFHT 118 (MA-22)
(XJA009)	Q1N79N78 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BOFLAP	BETA	REFERENCE INFORMATION
.000	2.000	-14.250	.000	SREF 2690.0000 SQ. FT.
-30.000	2.000	.000	.000	LREF 474.8000 INCHES
-30.000	2.000	-14.250	.000	BREF 936.6800 INCHES
.000	2.000	.000	.000	XMRF 1076.7000 IN. X0
				YMRP .0000 IN. Y0
				ZMRP 375.0000 IN. Z0
				SCALE .0100

RCS JET AMPLIFICATION FACTOR - ROLL, N(RM)

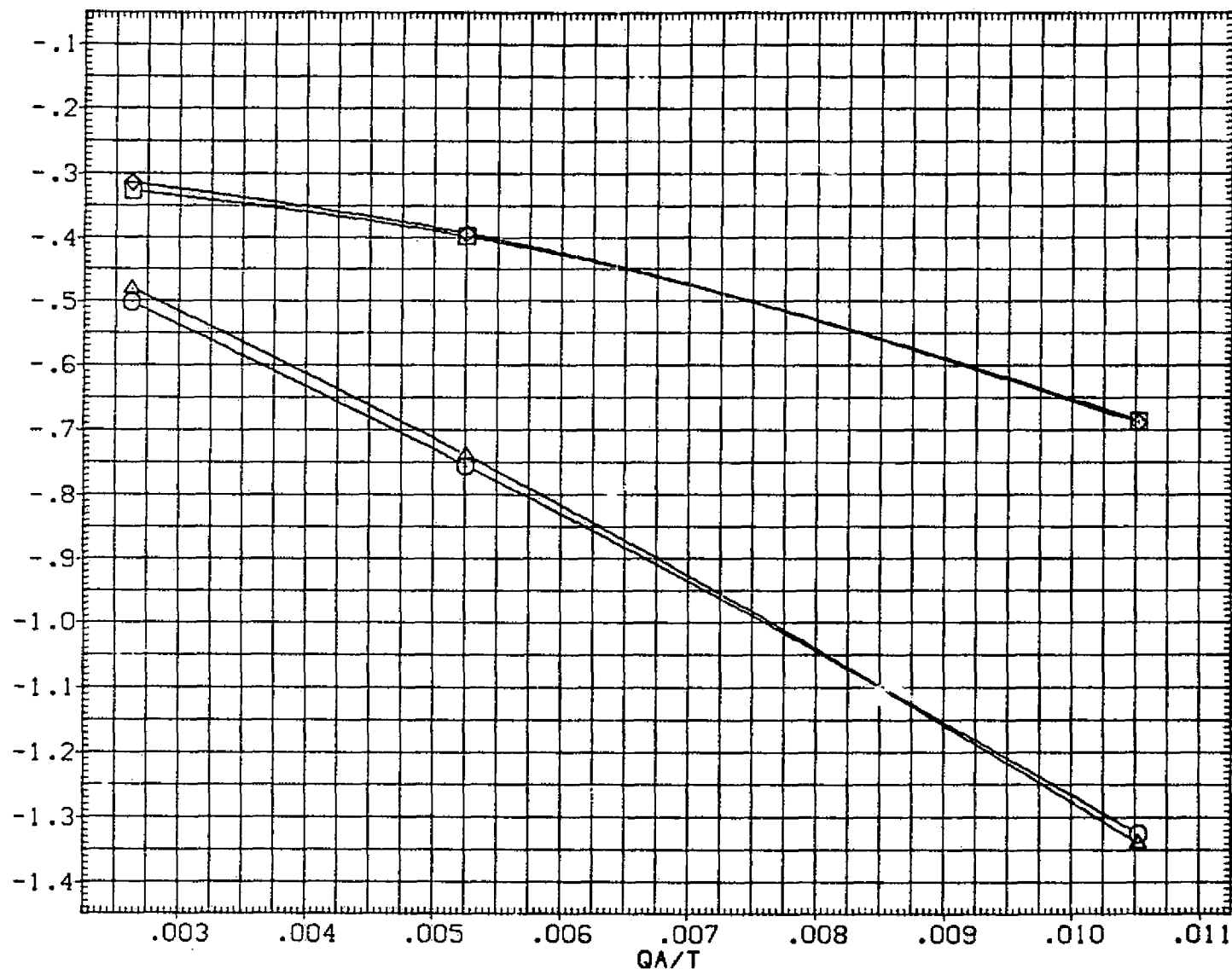


FIGURE 78. EFFECT OF ELEVON/BODY FLAP ON AMPLIFICATION FACTOR, JETS N79N78
(C) ALPHA = 10.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA020)	01N79N78 LARC CFHT 118 (MA-22)
(SJA035)	01N79N78 LARC CFHT 118 (MA-22)
(SJA046)	01N79N78 LARC CFHT 118 (MA-22)
(XJA009)	01N79N78 LARC CFHT 118 (MA-22)

ELEVON	NO.JET	BDFLAP	BETA	REFERENCE INFORMATION		
.000	2.000	-14.250	.000	SREF	2690.0000	SQ.FT.
-30.000	2.000	.000	.000	LREF	474.8000	INCHES
-30.000	2.000	-14.250	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - ROLL, N(RM)

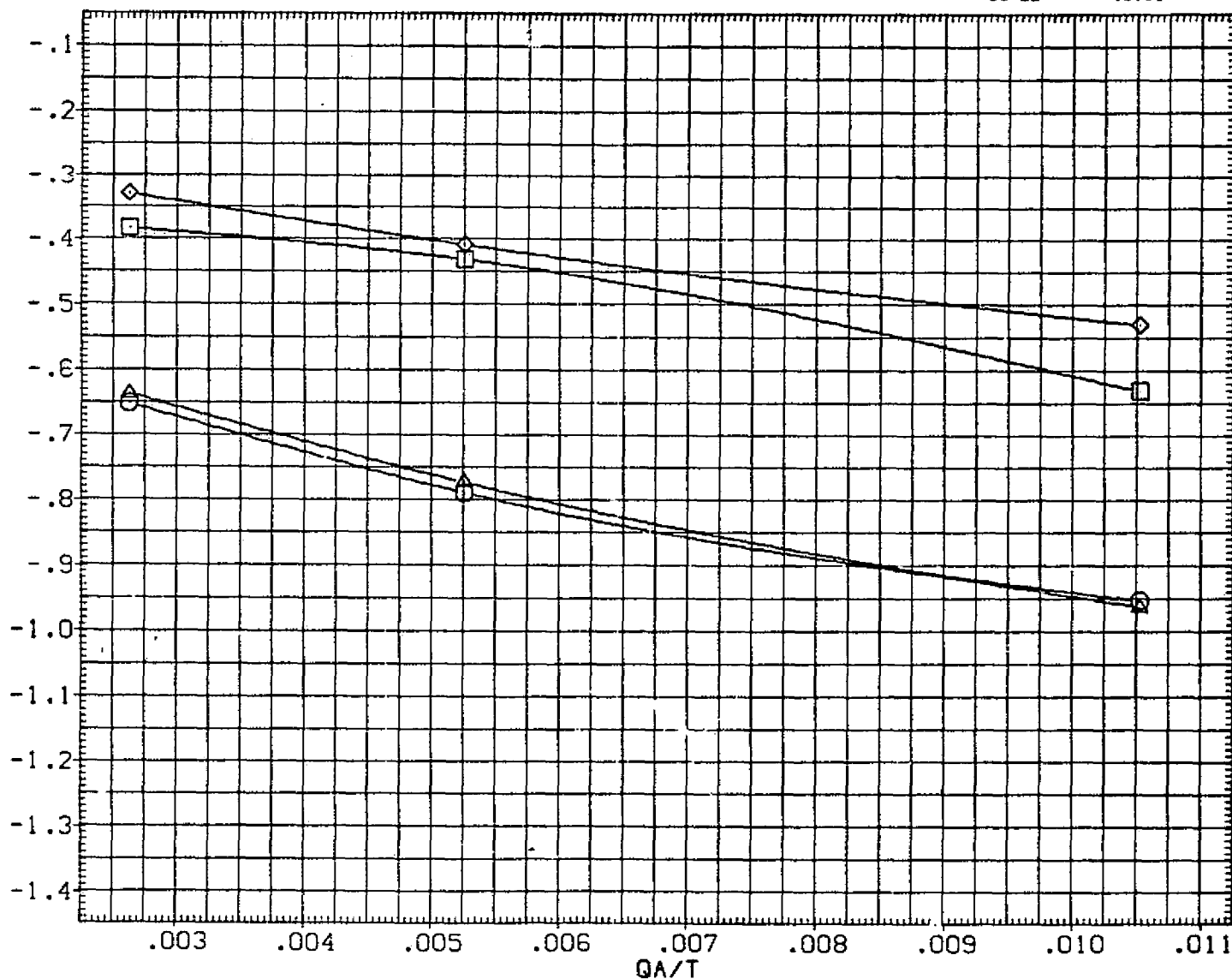


FIGURE 78. EFFECT OF ELEVON/BODY FLAP ON AMPLIFICATION FACTOR, JETS N79N78

(D) ALPHA = 20.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA020) □	01N79N78 LARC CFHT 118 (MA-22)
(SJA035) □	01N79N78 LARC CFHT 118 (MA-22)
(SJA046) X	01N79N78 LARC CFHT 118 (MA-22)
(XJA009) Δ	01N79N78 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BD FLAP	BETA	REFERENCE INFORMATION		
.000	2.000	-14.250	.000	SREF	2690.0000	50. FT.
-30.000	2.000	.000	.000	LREF	474.8000	INCHES
-30.000	2.000	-14.250	.000	BREF	936.6800	INCHES
.600	2.000	.000	.000	XMRP	1076.7000	IN. X0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.0100	

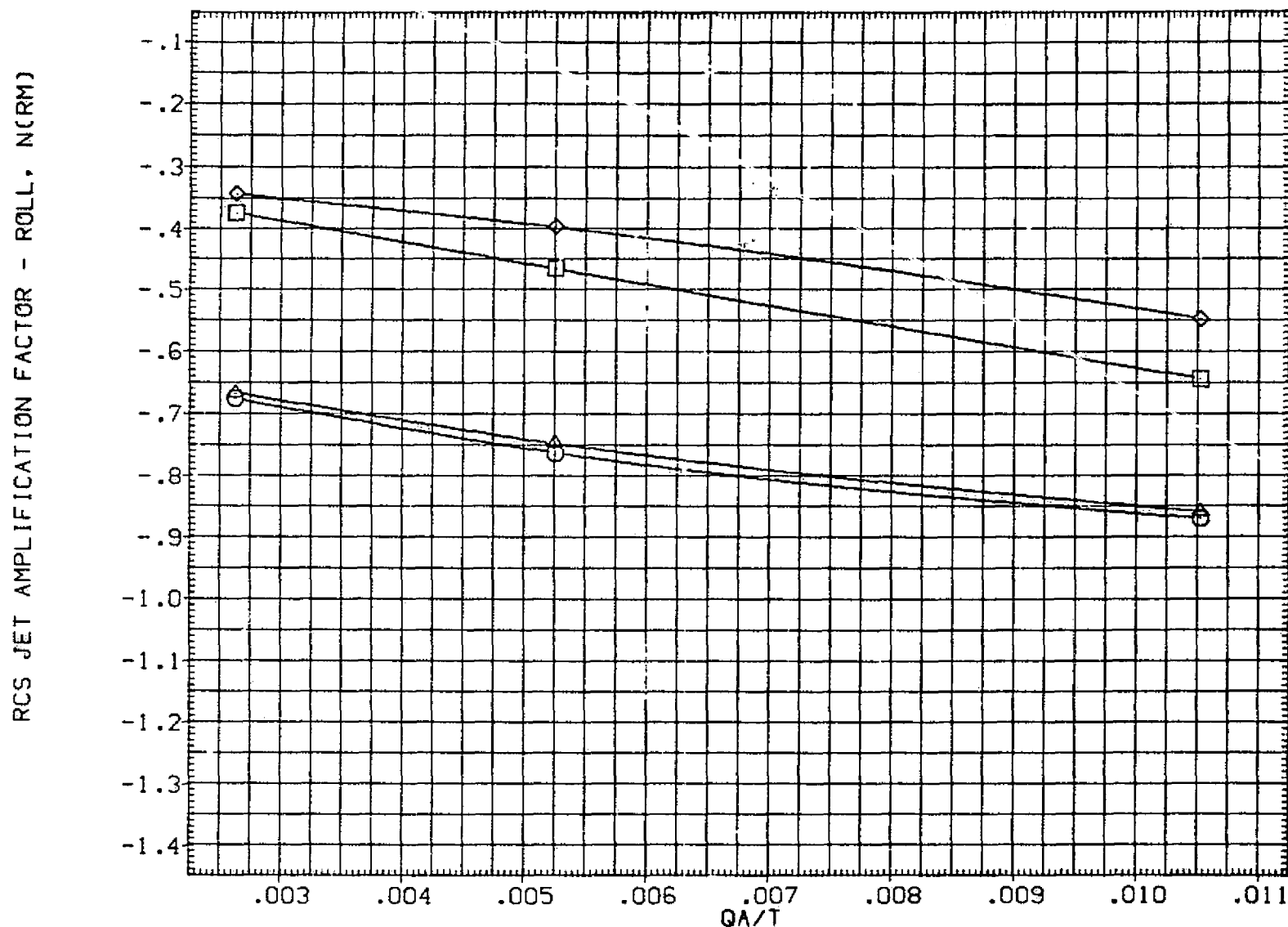


FIGURE 78. EFFECT OF ELEVON/BODY FLAP ON AMPLIFICATION FACTOR, JETS N79N78

(E) ALPHA = 35.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA020)	□ 01N79N78 LARC CFHT 118 (MA-22)
(SJA035)	○ 01N79N78 LARC CFHT 118 (MA-22)
(SJA046)	◇ 01N79N78 LARC CFHT 118 (MA-22)
(XJA009)	△ 01N79N78 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BD FLAP	BETA	REFERENCE INFORMATION
.000	2.000	-14.250	.000	SREF 2690.0000 SQ. FT.
-30.000	2.000	.000	.000	LREF 474.8000 INCHES
-30.000	2.000	-14.250	.000	BREF 936.6800 INCHES
.000	2.000	.000	.000	XMRP 1076.7000 IN. X0
				YMRP .0000 IN. Y0
				ZMRP 375.0000 IN. Z0
				SCALE .0100

RCS JET AMPLIFICATION FACTOR - YAW, N(°M)

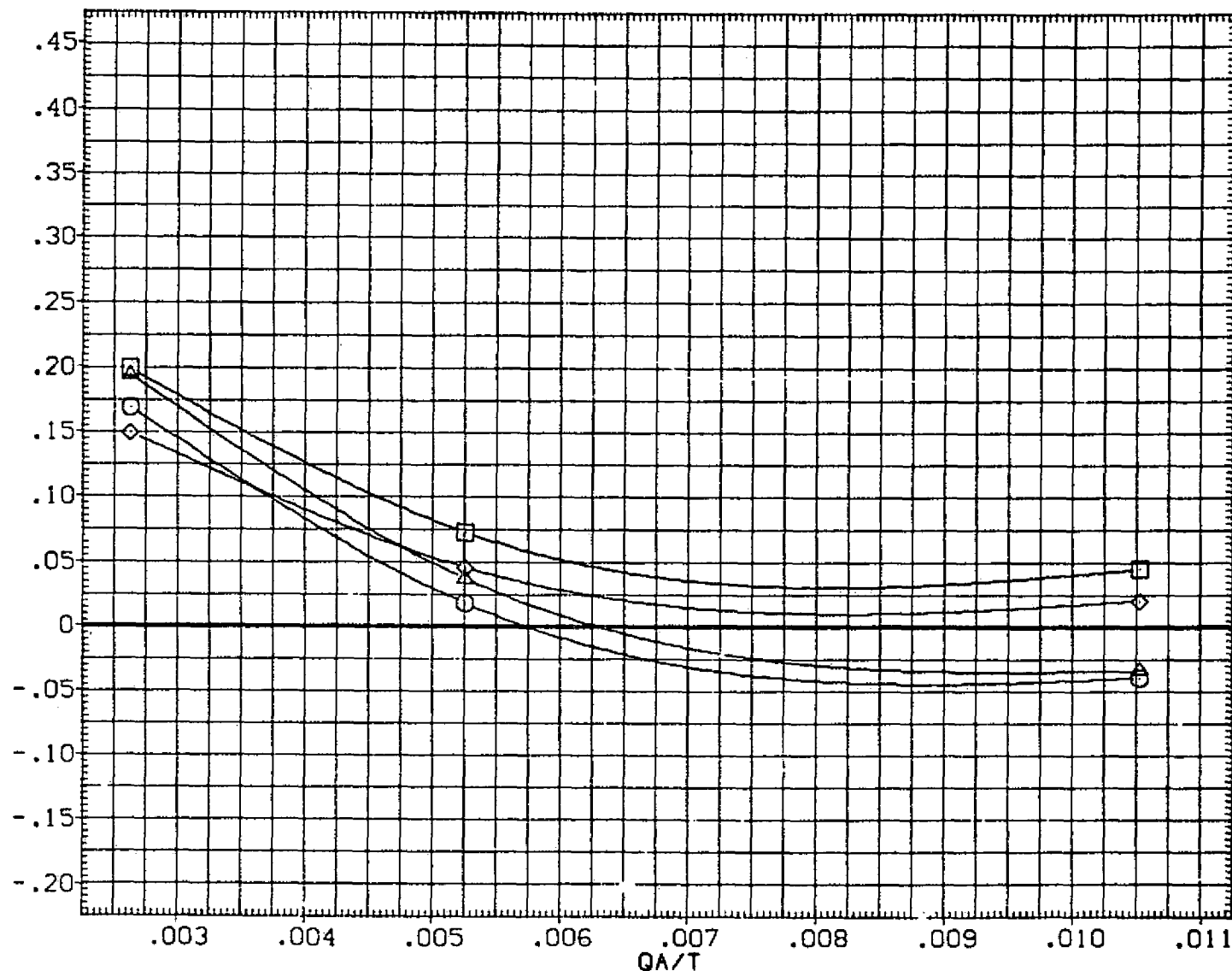


FIGURE 78. EFFECT OF ELEVON/BODY FLAP ON AMPLIFICATION FACTOR, JETS N79N78
(A) ALPHA = -8.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA020)	01N79N78 LARC CFHT 118 (MA-22)
(SJA035)	01N79N78 LARC CFHT 118 (MA-22)
(SJA046)	01N79N78 LARC CFHT 118 (MA-22)
(XJA009)	01N79N78 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BD FLAP	BETA	REFERENCE INFORMATION		
.000	2.000	-14.250	.000	SREF	2690.0000	50. FT.
-30.000	2.000	.000	.000	LREF	474.8000	INCHES
-30.000	2.000	-14.250	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - YAW, N(YM)

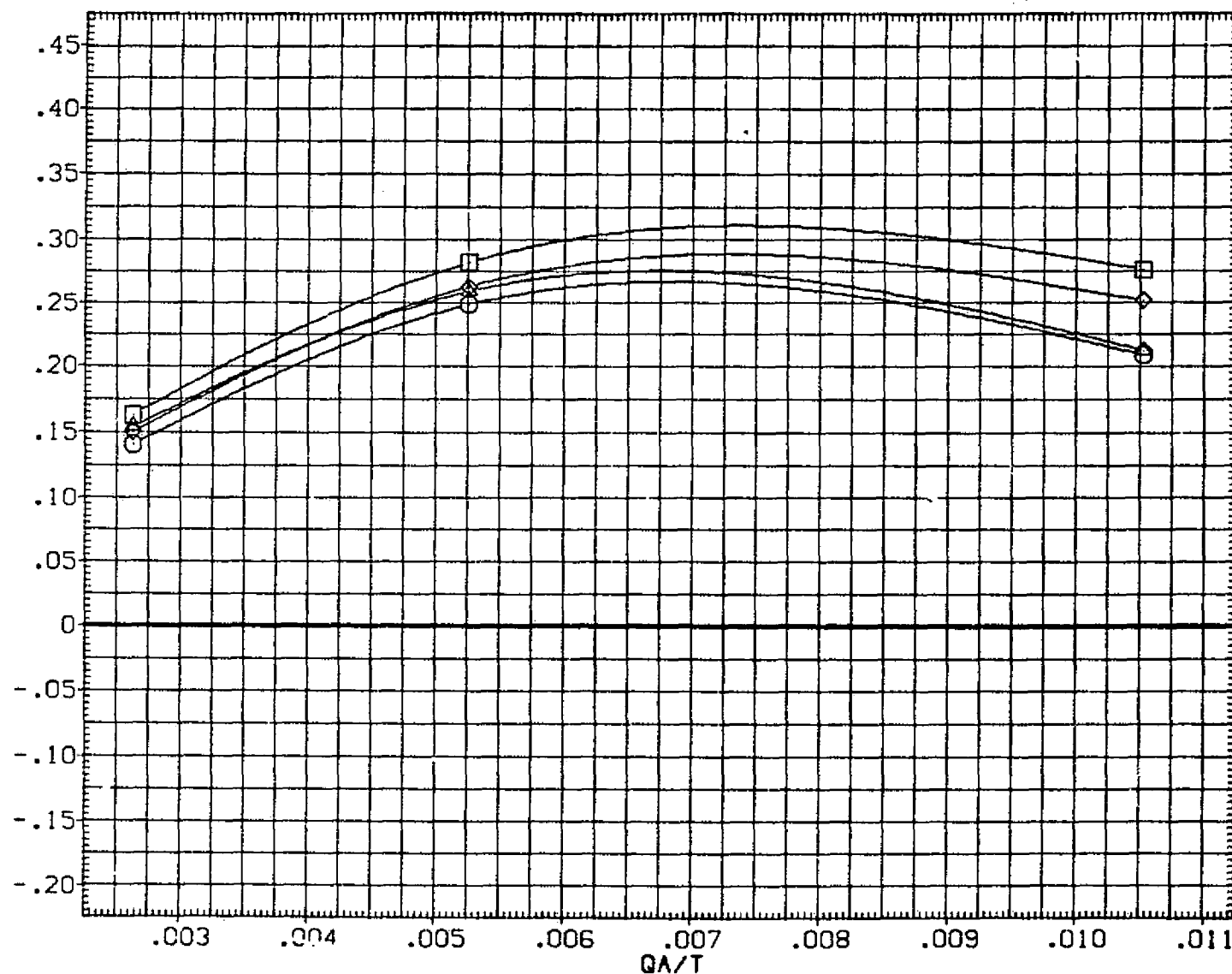


FIGURE 78. EFFECT OF ELEVON/BODY FLAP ON AMPLIFICATION FACTOR, JETS N79N78

(B) ALPHA = .00

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DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA020)	□ 01N79N78 LARC CFHT 118 (MA-22)
(SJA035)	□ 01N79N78 LARC CFHT 118 (MA-22)
(SJA046)	◇ 01N79N78 LARC CFHT 118 (MA-22)
(XJA009)	△ 01N79N78 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BD FLAP	BETA	REFERENCE INFORMATION		
.000	2.000	-14.250	.000	SREF	2690.0000	SQ. FT.
-30.000	2.000	.000	.000	LREF	474.8000	INCHES
-30.000	2.000	-14.250	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - YAW, N(YM)

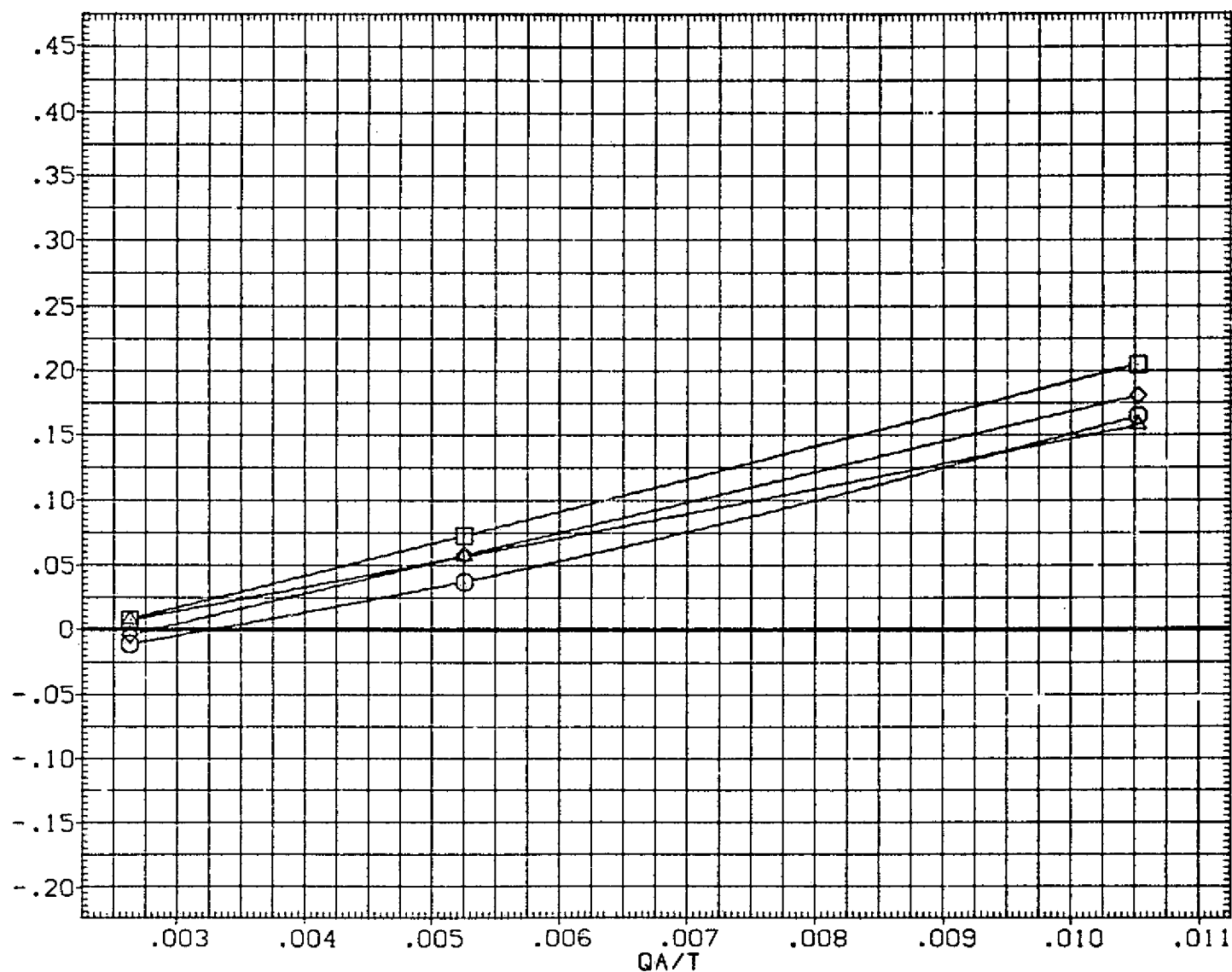


FIGURE 78. EFFECT OF ELEVON/BODY FLAP ON AMPLIFICATION FACTOR, JETS N79N78

(C) ALPHA = 10.00

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DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA020)	01N79N78 LARC CFHT 118 (MA-22)
(SJA035)	01N79N78 LARC CFHT 118 (MA-22)
(SJA046)	01N79N78 LARC CFHT 118 (MA-22)
(XJA009)	01N79N78 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BOFLAP	BETA	REFERENCE INFORMATION		
.000	2.000	-14.250	.000	SREF	2690.0000	SQ. FT.
-30.000	2.000	.000	.000	LREF	474.8000	INCHES
-30.000	2.000	-14.250	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - YAW, N(YM)

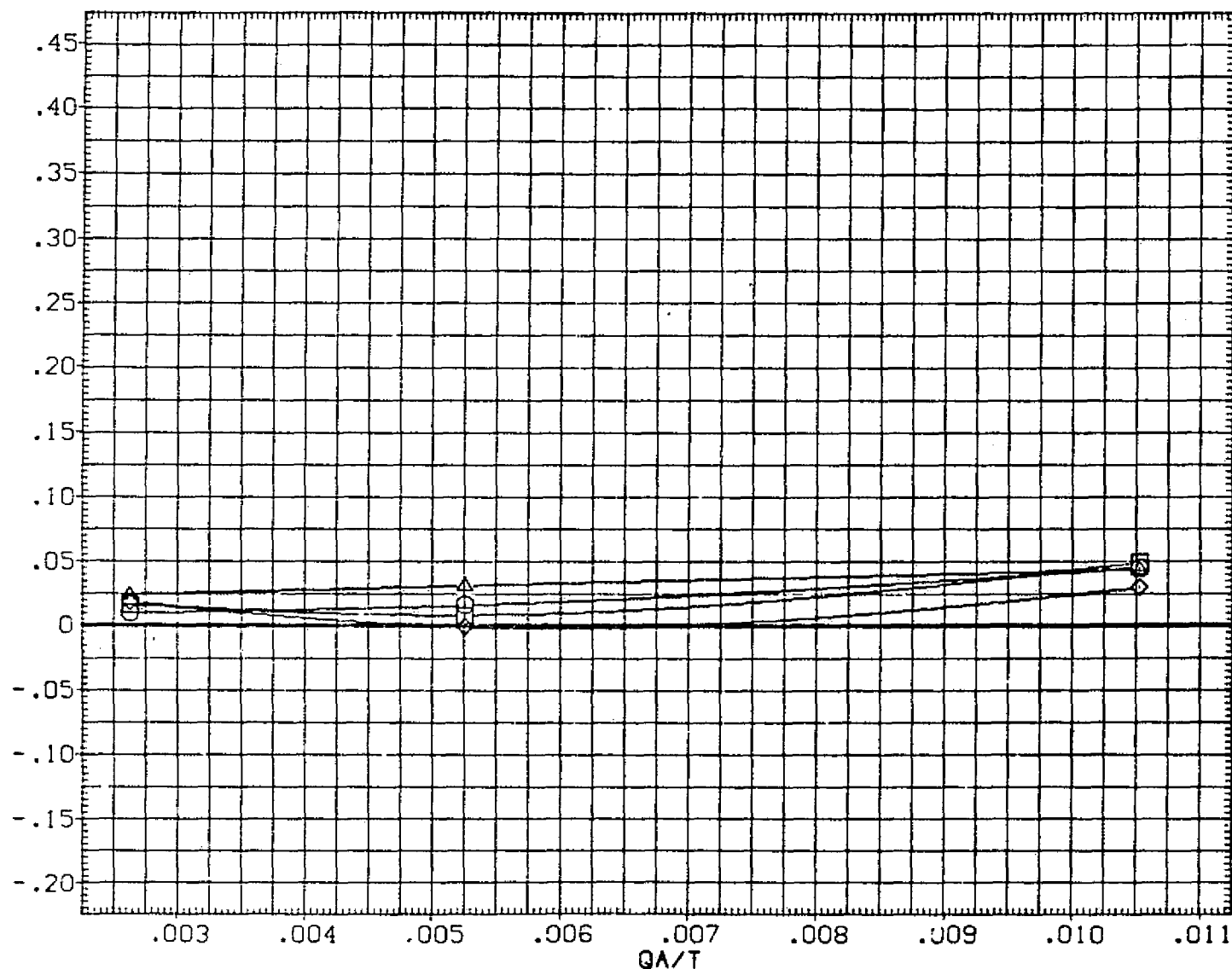


FIGURE 78. EFFECT OF ELEVON/BODY FLAP ON AMPLIFICATION FACTOR, JETS N79N78

(D) ALPHA = 20.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA020)	01N79N78 LARC CFHT 118 (MA-22)
(SJA035)	01N79N78 LARC CFHT 118 (MA-22)
(SJA046)	01N79N78 LARC CFHT 118 (MA-22)
(XJA009)	01N79N78 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BD FLAP	BETA	REFERENCE INFORMATION		
.000	2.000	-14.250	.000	SREF	2690.0000	50. FT.
-30.000	2.000	.000	.000	LREF	474.8000	INCHES
-30.000	2.000	-14.250	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - YAW, N(YM)

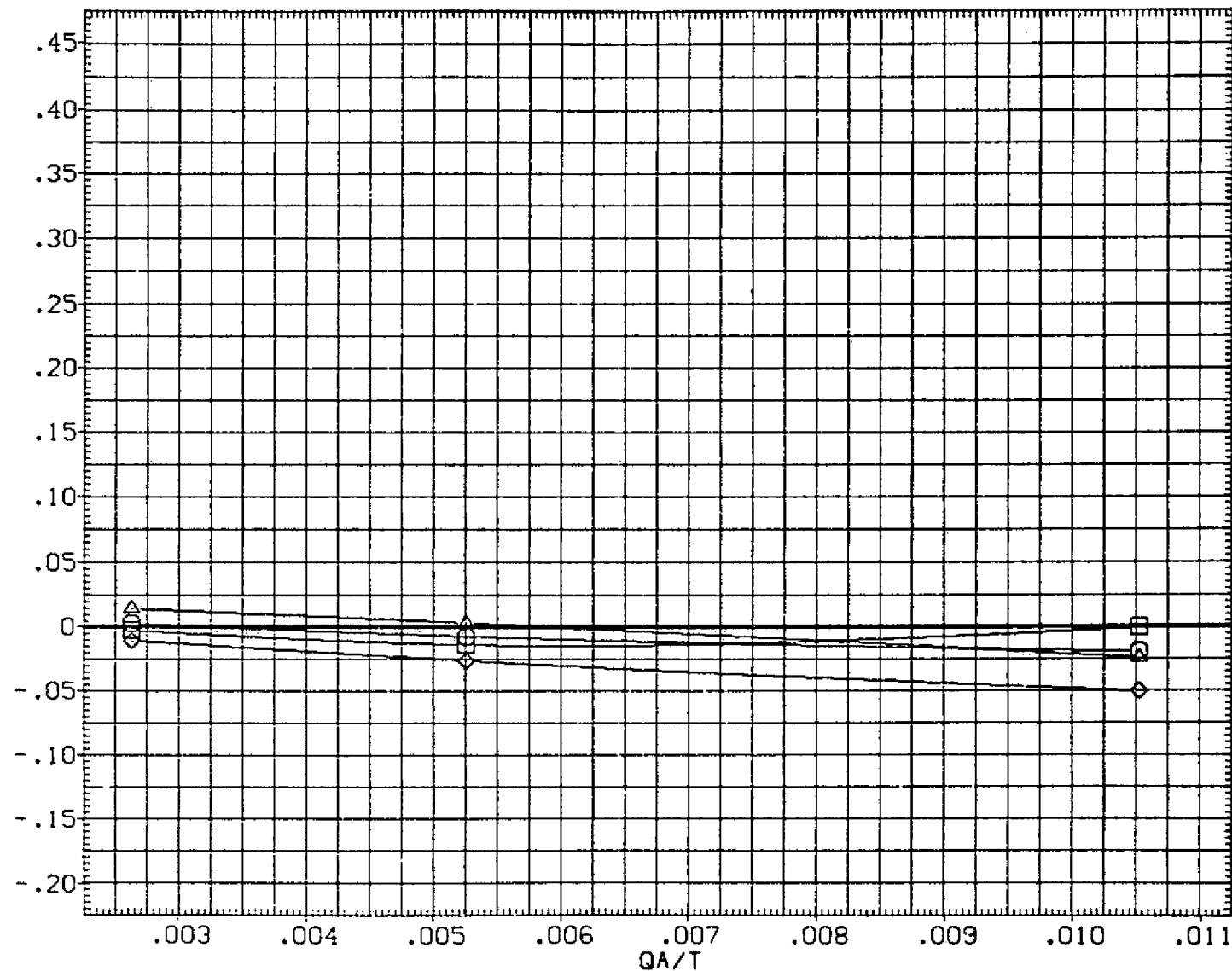


FIGURE 78. EFFECT OF ELEVON/BODY FLAP ON AMPLIFICATION FACTOR, JETS N79N78
(E) ALPHA = 35.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
[SJA020]	01N79N78 LARC CFHT 118 (MA-22)
[SJA035]	01N79N78 LARC CFHT 118 (MA-22)
[SJA046]	01N79N78 LARC CFHT 118 (MA-22)
[XJA009]	01N79N78 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BO FLAP	BETA	REFERENCE INFORMATION		
.000	2.000	-14.250	.000	SREF	2690.0000	SQ. FT.
-30.000	2.000	.000	.000	LREF	474.8000	INCHES
-30.000	2.000	-14.250	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - SIDE FORCE, N(SF)

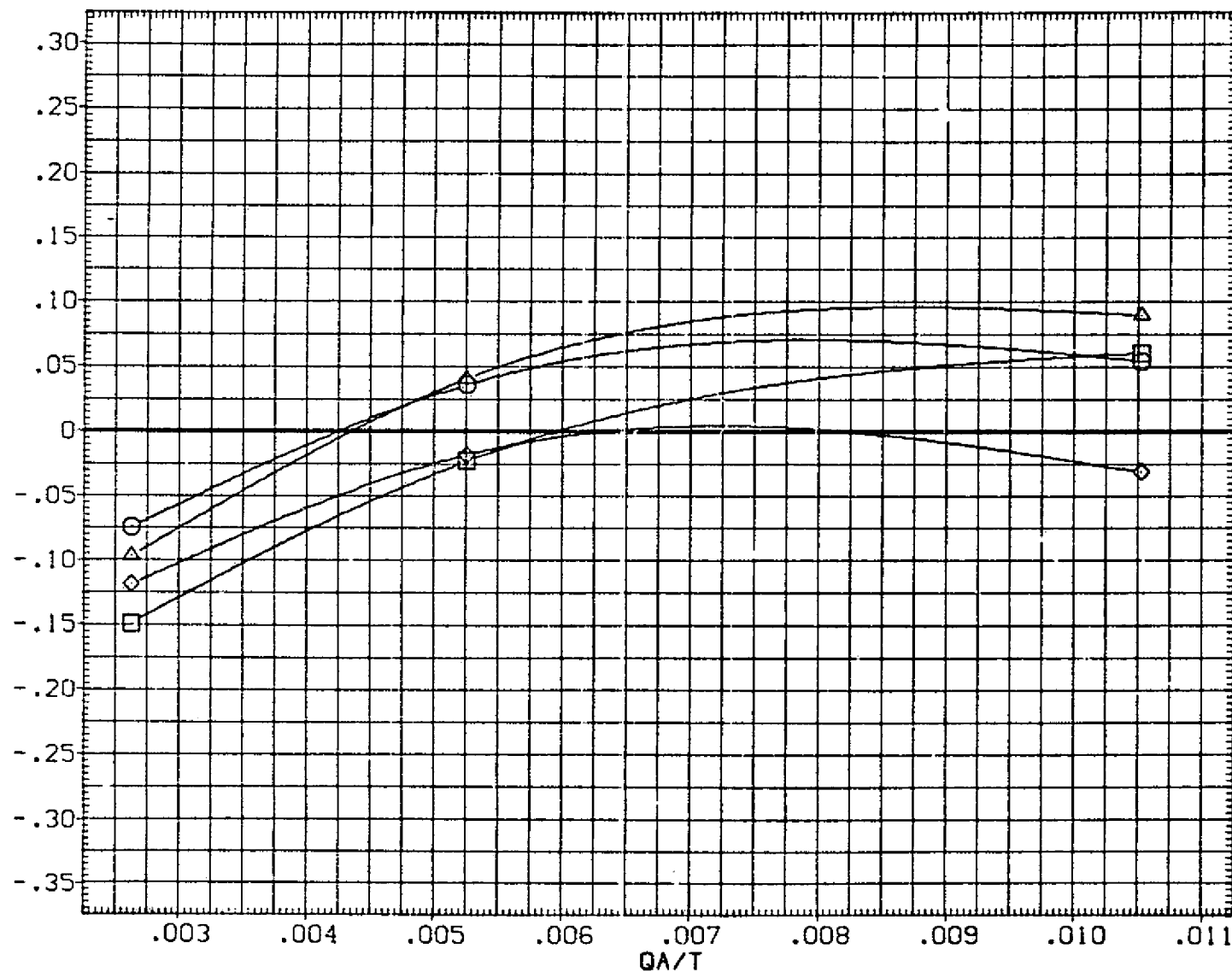


FIGURE 78. EFFECT OF ELEVON/BODY FLAP ON AMPLIFICATION FACTOR, JETS N79N78

(A) ALPHA = -8.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA020)	01N79N78 LARC CFHT 118 (MA-22)
(SJA035)	01N79N78 LARC CFHT 118 (MA-22)
(SJA046)	01N79N78 LARC CFHT 118 (MA-22)
(XJA009)	01N79N78 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BD FLAP	BETA	REFERENCE INFORMATION
.000	2.000	-14.250	.000	SREF 2690.0000 SQ. FT.
-30.000	2.000	.000	.000	LREF 474.8000 INCHES
-30.000	2.000	-14.250	.000	BREF 936.6800 INCHES
.000	2.000	.000	.000	XMRP 1076.7000 IN. X0
				YMRP .0000 IN. Y0
				ZMRP 375.0000 IN. Z0
				SCALE .0100

RCS JET AMPLIFICATION FACTOR - SIDE FORCE, N(SF)

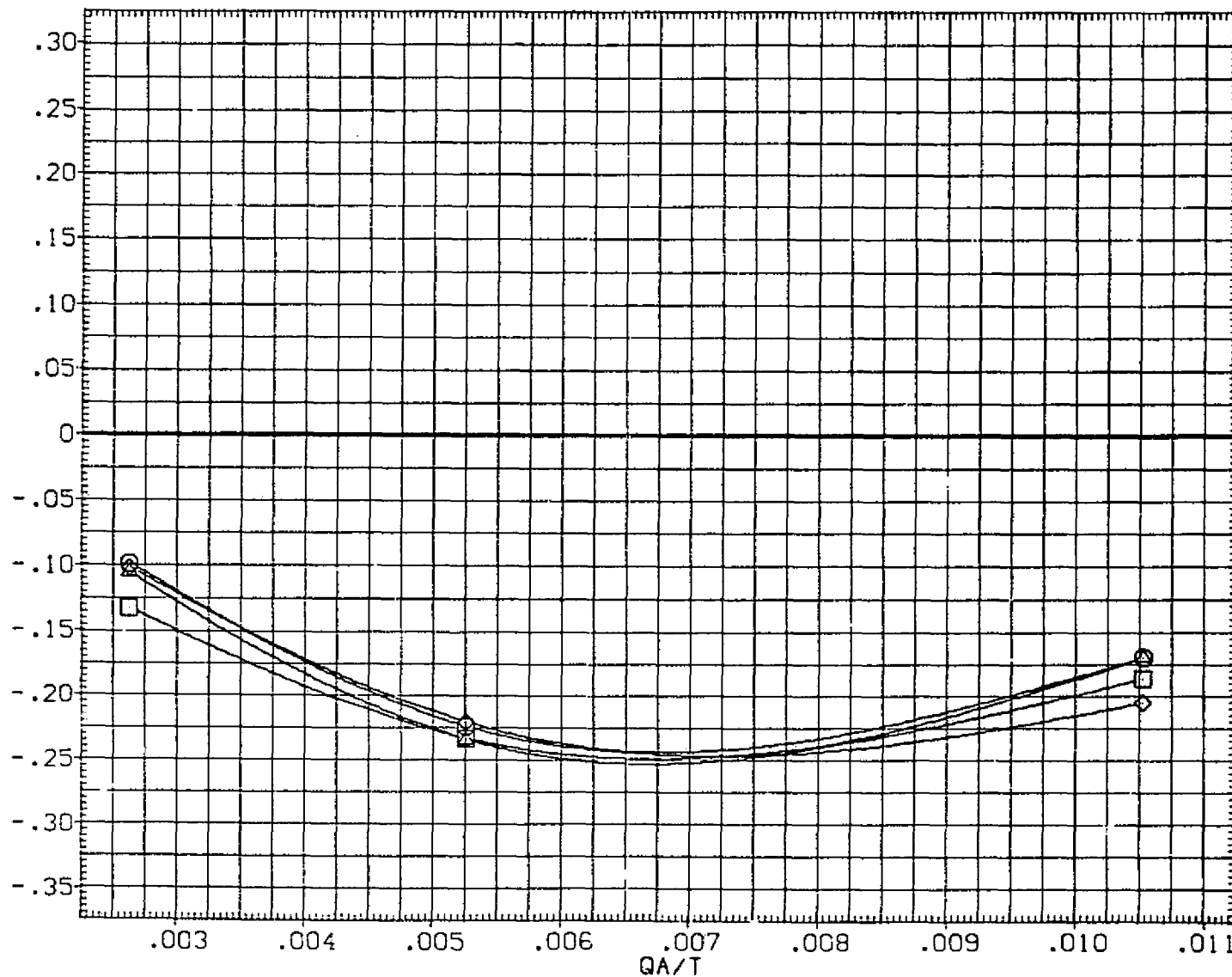


FIGURE 78. EFFECT OF ELEVON/BODY FLAP ON AMPLIFICATION FACTOR, JETS N79N78
(B) ALPHA = .00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA020)	Q1N79N78 LARC CFHT 118 (MA-22)
(SJA035)	Q1N79N78 LARC CFHT 118 (MA-22)
(SJA046)	Q1N79N78 LARC CFHT 118 (MA-22)
(XJA009)	Q1N79N78 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BO FLAP	BETA	REFERENCE INFORMATION		
.000	2.000	-14.250	.000	SREF	2690.0000	SQ. FT.
-30.000	2.000	.000	.000	LREF	474.8000	INCHES
-30.000	2.000	-14.250	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.0100	

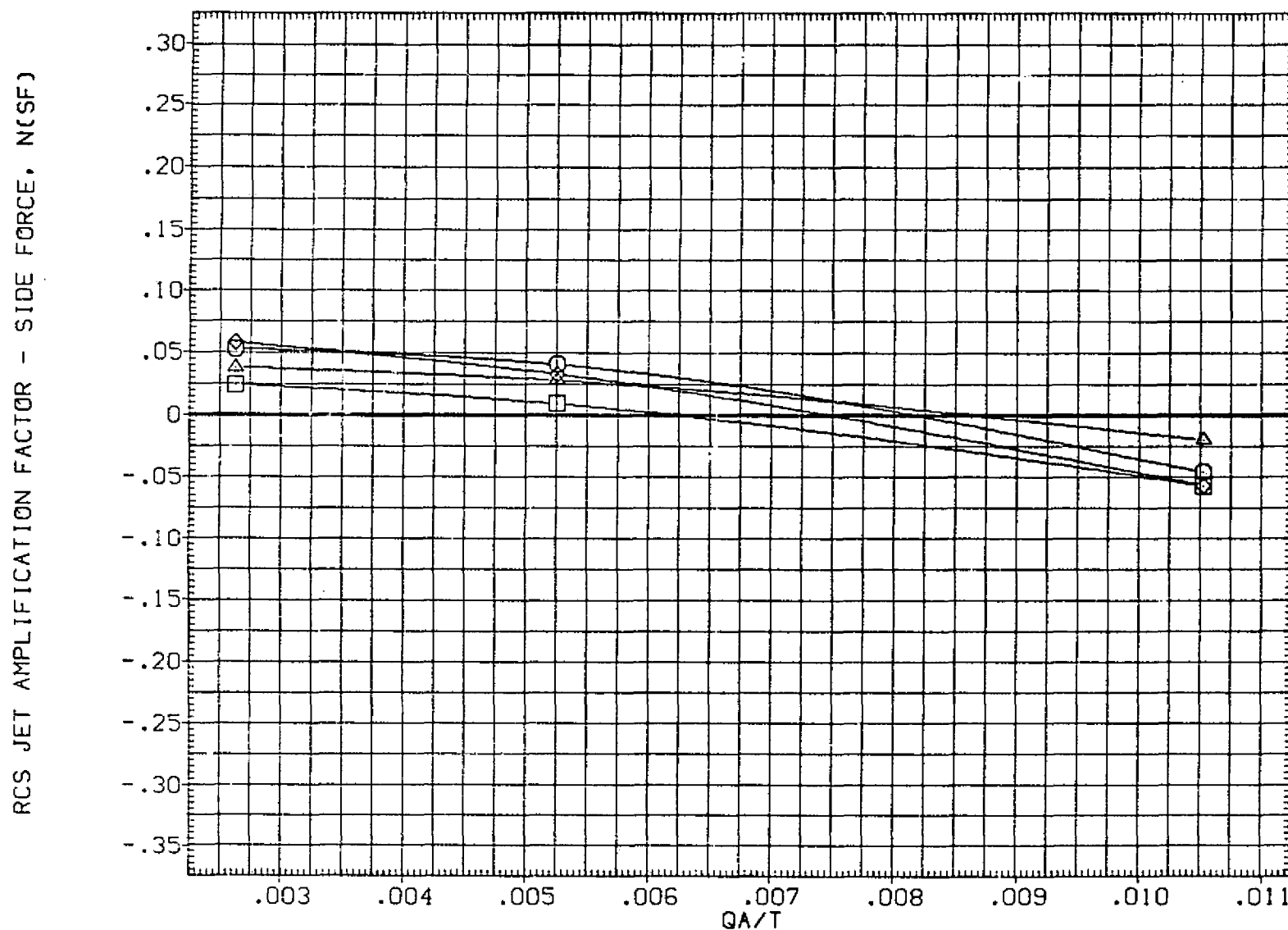


FIGURE 78. EFFECT OF ELEVON/BODY FLAP ON AMPLIFICATION FACTOR, JETS N79N78

(C) ALPHA = 10.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA020)	01N79N78 LARC CFHT 118 (MA-22)
(SJA035)	01N79N78 LARC CFHT 118 (MA-22)
(SJA046)	01N79N78 LARC CFHT 118 (MA-22)
(XJA009)	01N79N78 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BD FLAP	BETA	REFERENCE INFORMATION
.000	2.000	-14.250	.000	SREF 2690.0000 SQ. FT.
-30.000	2.000	.000	.000	LREF 474.8000 INCHES
-30.000	2.000	-14.250	.000	BREF 936.6800 INCHES
.000	2.000	.000	.000	XMRP 1076.7000 IN. X0
				YMRP .0000 IN. Y0
				ZMRP 375.0000 IN. Z0
				SCALE .0100

RCS JET AMPLIFICATION FACTOR - SIDE FORCE, N(SF)

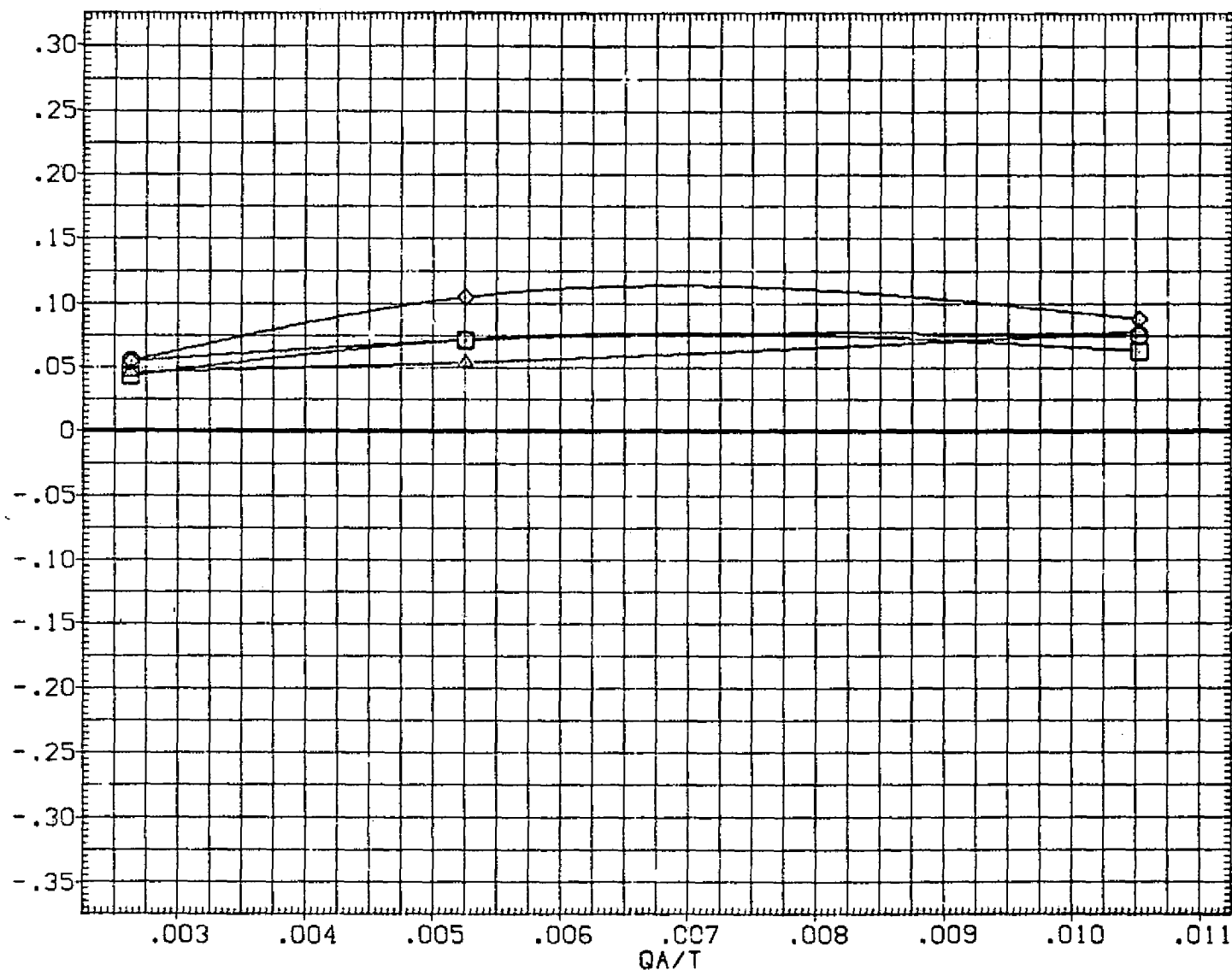


FIGURE 78. EFFECT OF ELEVON/BODY FLAP ON AMPLIFICATION FACTOR, JETS N79N78
(D) ALPHA = 20.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA020)	01N79N78 LARC CFHT 118 (MA-22)
(SJA035)	01N79N78 LARC CFHT 118 (MA-22)
(SJA046)	01N79N78 LARC CFHT 118 (MA-22)
(XJA009)	01N79N78 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BD FLAP	BETA	REFERENCE INFORMATION
.000	2.000	-14.250	.000	SREF 2690.0000 SQ. FT.
-30.000	2.000	.000	.000	LREF 474.8000 INCHES
-30.000	2.000	-14.250	.000	BREF 936.6800 INCHES
.000	2.000	.000	.000	XMRP 1076.7000 IN. X0
				YMRP .0000 IN. Y0
				ZMRP 375.0000 IN. Z0
				SCALE .0100

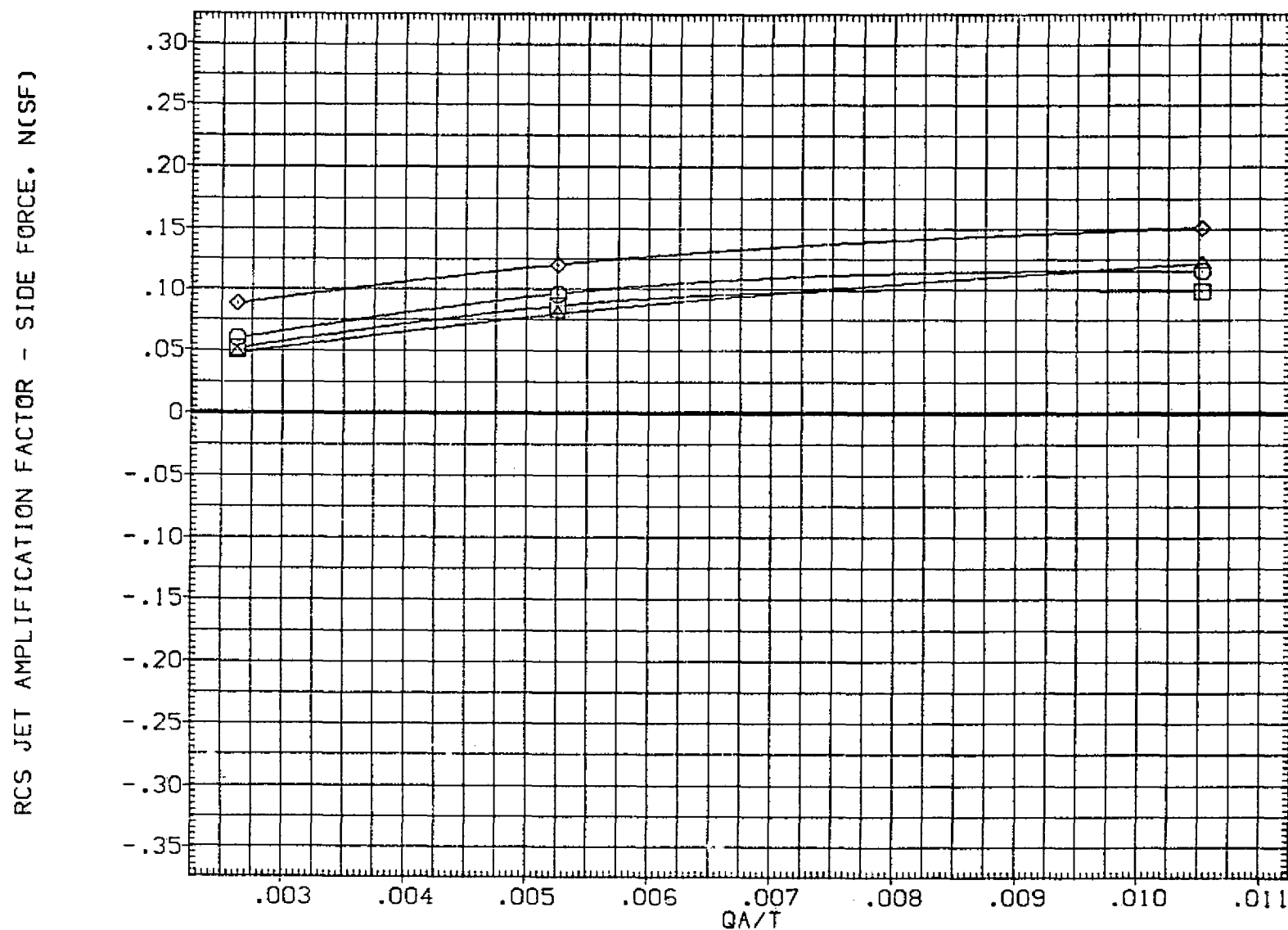


FIGURE 78. EFFECT OF ELEVON/BODY FLAP ON AMPLIFICATION FACTOR, JETS N79N78

(E) ALPHA = 35.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	NO. JET	BD FLAP	BETA	REFERENCE INFORMATION		
(SJA021)	01N85N50 LARC CFHT 118 (MA-22)	.000	2.000	-14.250	.000	SREF	2690.0000	SQ. FT.
(SJA036)	01N85N50 LARC CFHT 118 (MA-22)	-30.000	2.000	.000	.000	LREF	474.8000	INCHES
(SJA082)	01N85N50 LARC CFHT 118 (MA-22)	-30.000	2.000	-14.250	.000	BREF	936.6800	INCHES
(SJA010)	01N85N50 LARC CFHT 118 (MA-22)	.000	2.000	.000	.000	XMRP	1076.7000	IN. XO
						YMRP	.0000	IN. YO
						ZMRP	375.0000	IN. ZO
						SCALE	.0100	

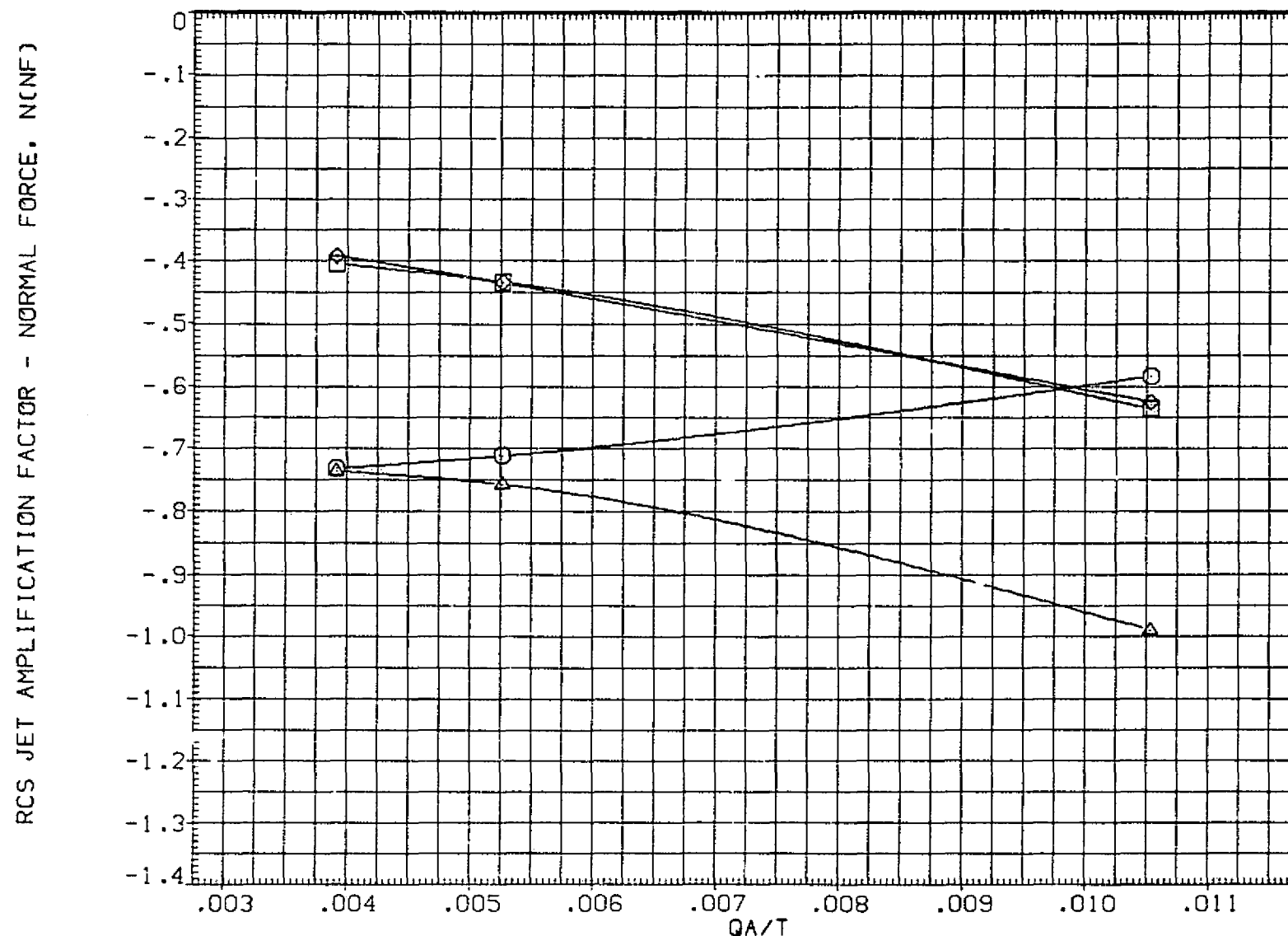


FIGURE 79. EFFECT OF ELEVON/BODY FLAP ON AMPLIFICATION FACTOR, JETS N50N85

(A) ALPHA = -8.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA021)	01N85N50 LARC CFHT 118 (MA-22)
(SJA036)	01N85N50 LARC CFHT 118 (MA-22)
(SJA082)	01N85N50 LARC CFHT 118 (MA-22)
(SJA010)	01N85N50 LARC CFHT 118 (MA-22)

ELEVON	NO.JET	BDFLAP	BETA	REFERENCE INFORMATION		
.000	2.000	-14.250	.000	SREF	2690.0000	50. FT.
-30.000	2.000	.000	.000	LREF	474.8000	INCHES
-30.000	2.000	-14.250	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.0100	

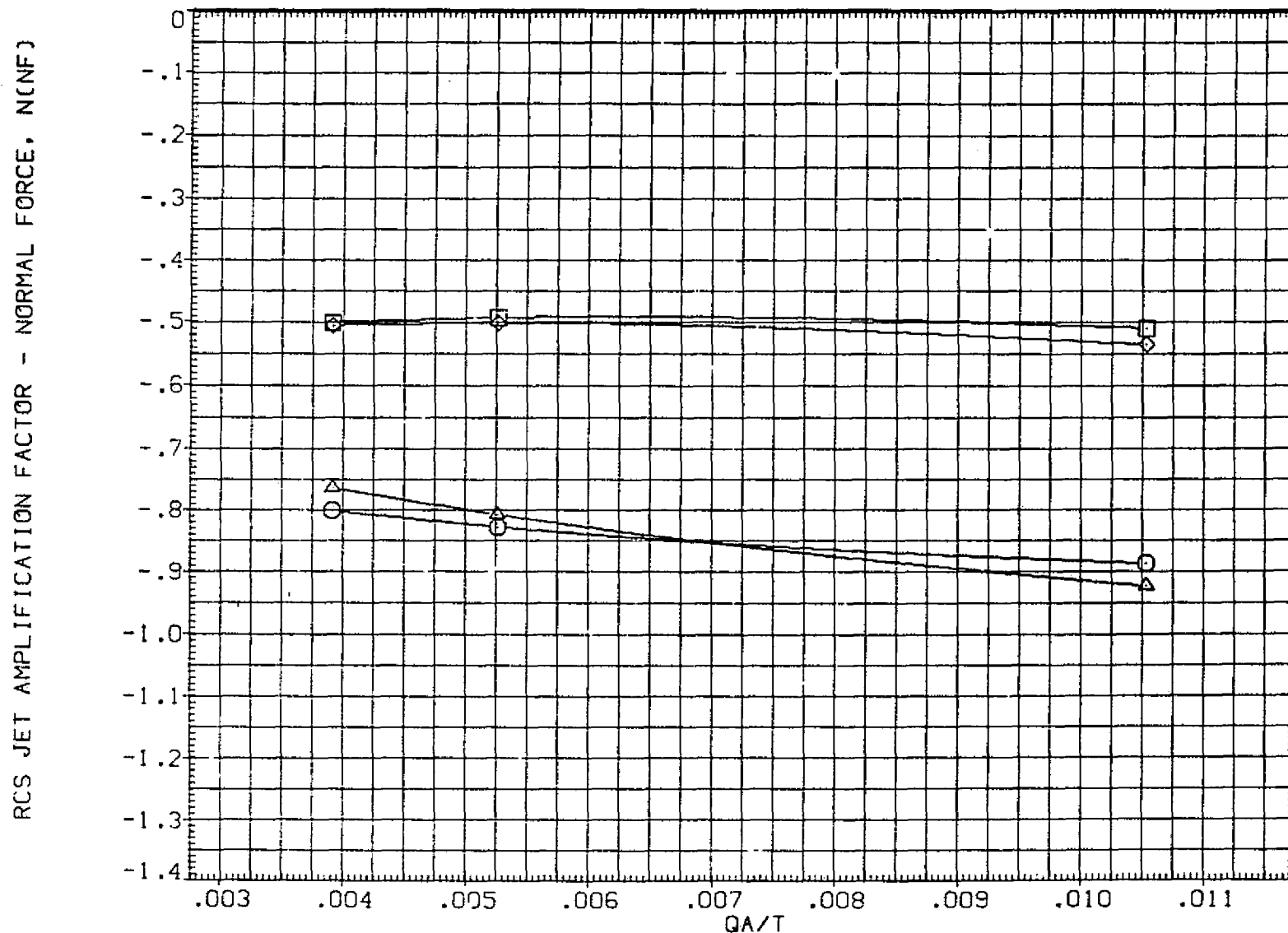


FIGURE 79. EFFECT OF ELEVON/BODY FLAP ON AMPLIFICATION FACTOR, JETS N50N85

(B) ALPHA = .00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA021)	01N85N50 LARC CFHT 118 (MA-22)
(SJA036)	01N85N50 LARC CFHT 118 (MA-22)
(SJA082)	01N85N50 LARC CFHT 118 (MA-22)
(SJA010)	01N85N50 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BDFLAP	BETA	REFERENCE INFORMATION
.000	2.000	-14.250	.000	SREF 2690.0000 SQ. FT.
-30.000	2.000	.000	.000	LREF 474.8000 INCHES
-30.000	2.000	-14.250	.000	BREF 936.6800 INCHES
.000	2.000	.000	.000	XMRP 1076.7000 IN. X0
				YMRP .0000 IN. Y0
				ZMRP 375.0000 IN. Z0
				SCALE .0100

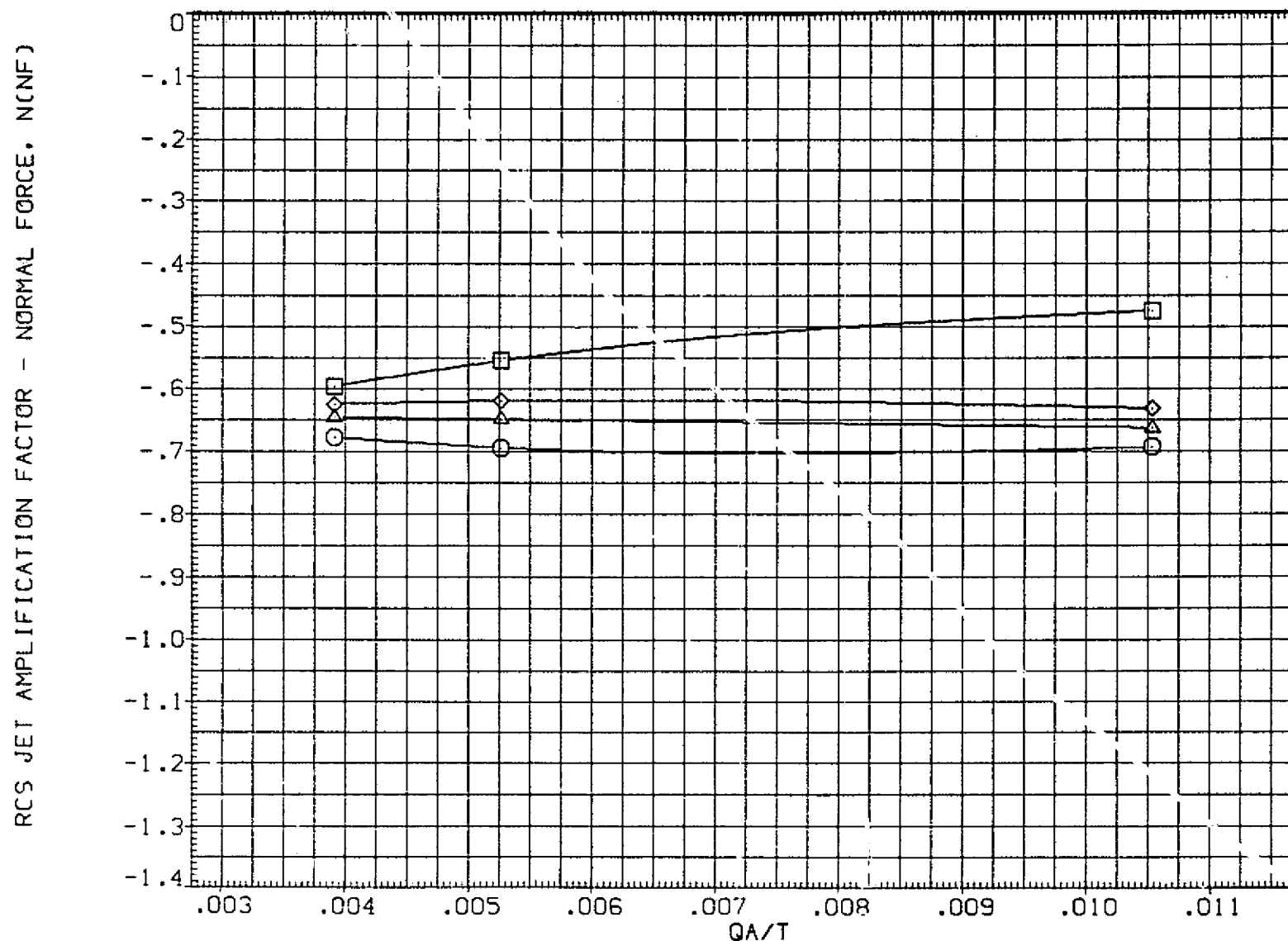


FIGURE 79. EFFECT OF ELEVON/BODY FLAP ON AMPLIFICATION FACTOR, JETS N50N85

(C) ALPHA = 10.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA021)	01N85N50 LARC CFHT 118 (MA-22)
(SJA036)	01N85N50 LARC CFHT 118 (MA-22)
(SJA082)	01N85N50 LARC CFHT 118 (MA-22)
(SJA010)	01N85N50 LARC CFHT 118 (MA-22)

ELEVON	NO.JET	BOFLAP	BETA	REFERENCE INFORMATION		
.000	2.000	-14.250	.000	SREF	2690.0000	SQ.FT.
-30.000	2.000	.000	.000	LREF	474.8000	INCHES
-30.000	2.000	-14.250	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - NORMAL FORCE, N(NF)

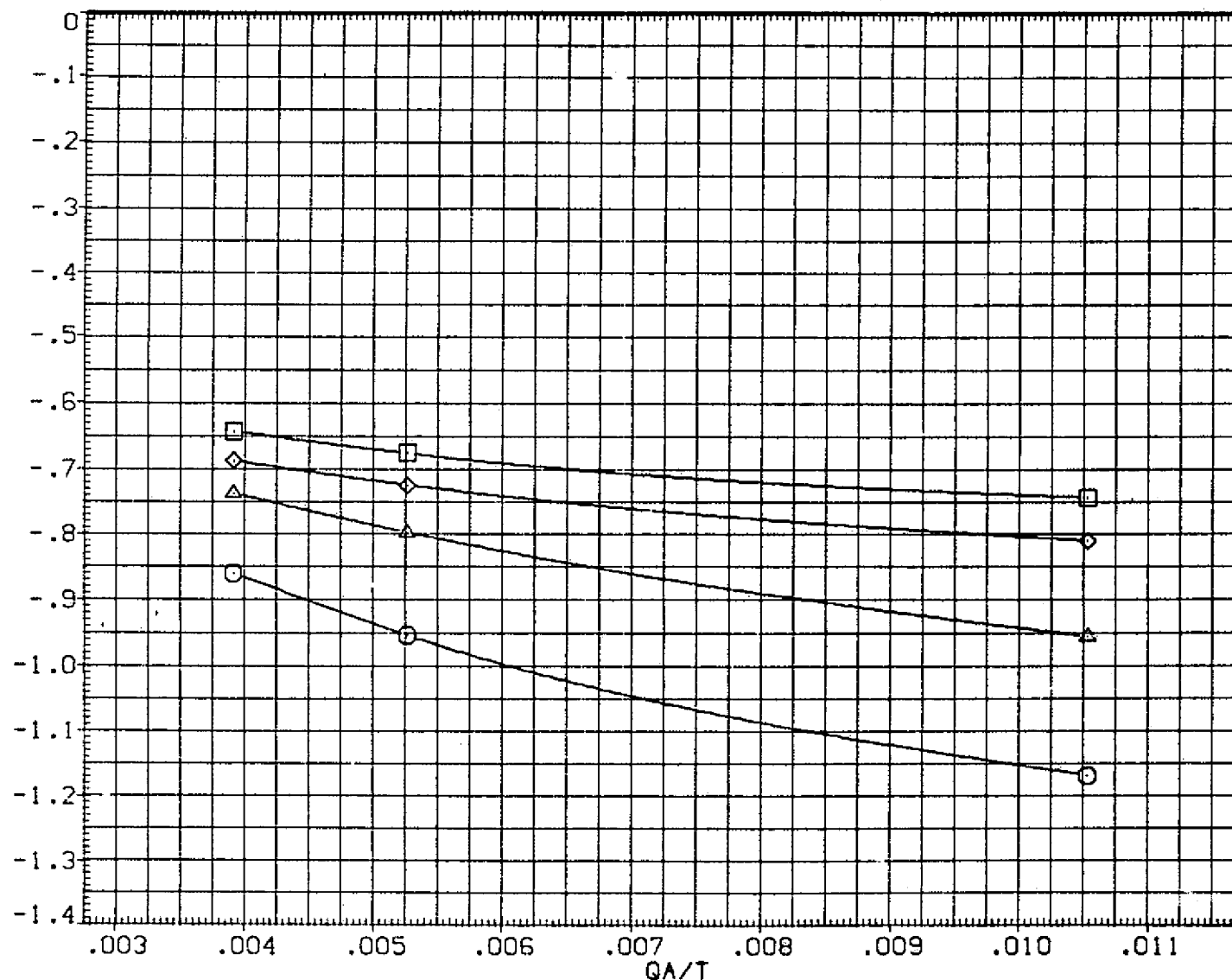


FIGURE 79. EFFECT OF ELEVON/BODY FLAP ON AMPLIFICATION FACTOR, JETS N50N85
(D) ALPHA = 20.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA021) □	01N85N50 LARC CFHT 118 (MA-22)
(SJA036) □	01N85N50 LARC CFHT 118 (MA-22)
(SJA082) ◇	01N85N50 LARC CFHT 118 (MA-22)
(SJA010) △	01N85N50 LARC CFHT 118 (MA-22)

ELEVON	NO.JET	BDFLAP	BETA	REFERENCE INFORMATION		
.000	2.000	-14.250	.000	SREF	2690.0000	SQ.FT.
-30.000	2.000	.000	.000	LREF	474.8000	INCHES
-30.000	2.000	-14.250	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - NORMAL FORCE, N(NF)

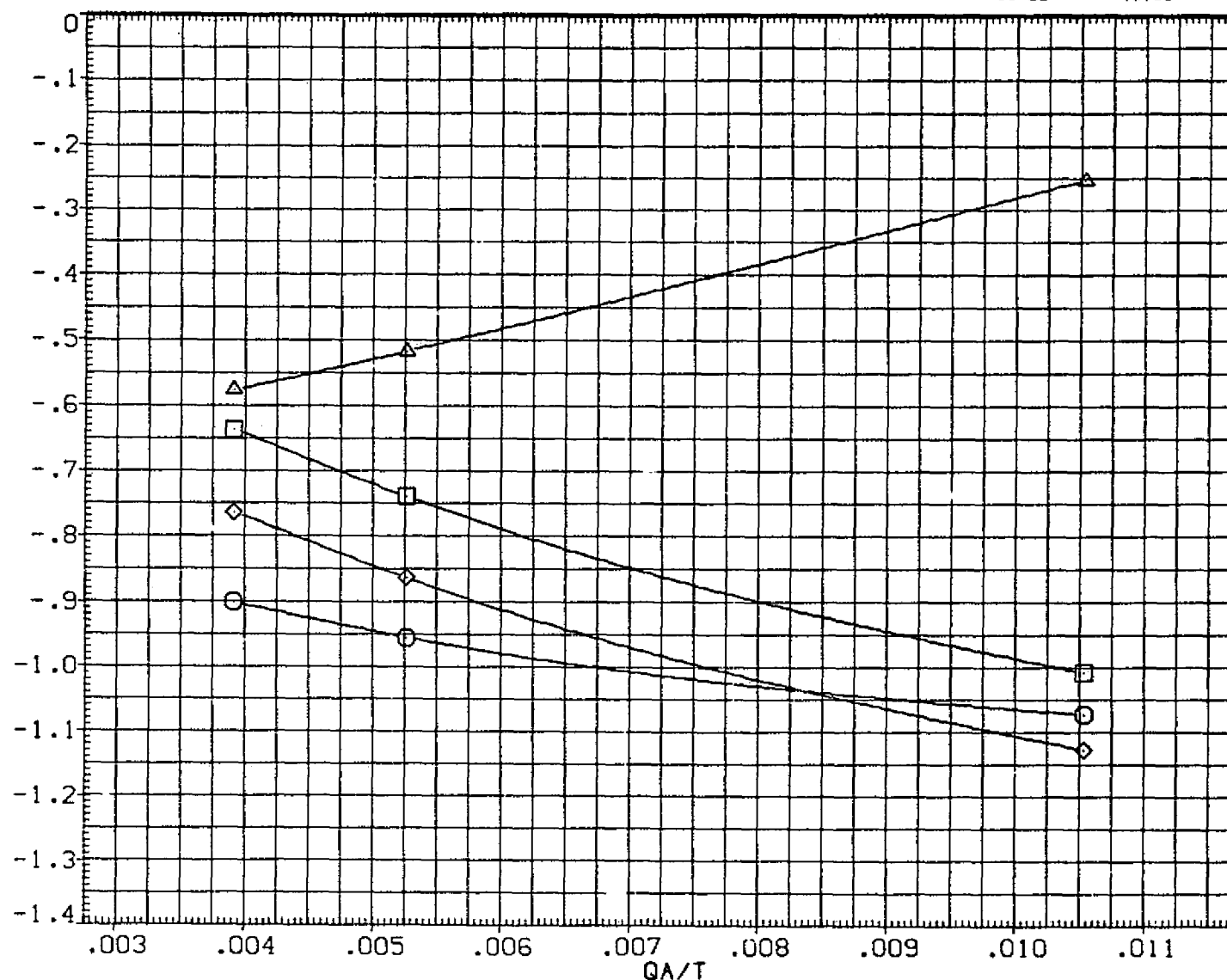


FIGURE 79. EFFECT OF ELEVON/BODY FLAP ON AMPLIFICATION FACTOR, JETS N50N85
(E) ALPHA = 35.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA021)	01N85N50 LARC CFHT 118 (MA-22)
(SJA036)	01N85N50 LARC CFHT 118 (MA-22)
(SJA082)	01N85N50 LARC CFHT 118 (MA-22)
(SJA010)	01N85N50 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BD FLAP	BETA	REFERENCE INFORMATION
.000	2.000	-14.250	.000	SREF 2690.0000 SQ. FT.
-30.000	2.000	.000	.000	LREF 474.8000 INCHES
-30.000	2.000	-14.250	.000	BREF 936.6800 INCHES
.000	2.000	.000	.000	XMRP 1076.7000 IN. X0
				YMRP .0000 IN. Y0
				ZMRP 375.0000 IN. Z0
				SCALE .0100

RCS JET AMPLIFICATION FACTOR - PITCH, N(PM)

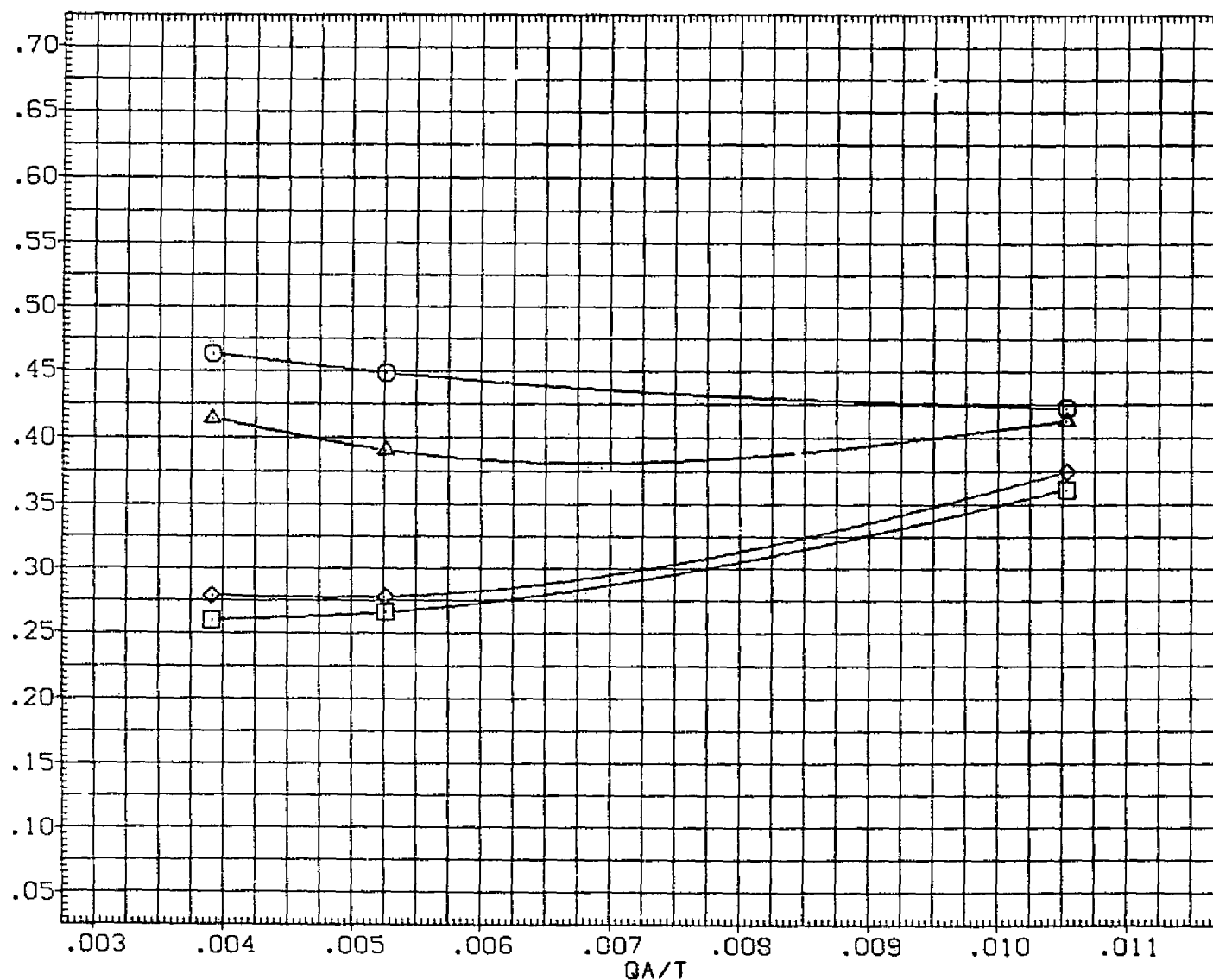


FIGURE 79. EFFECT OF ELEVON/BODY FLAP ON AMPLIFICATION FACTOR, JETS N50N85

(A) ALPHA = -8.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA021) ○	01N85N50 LARC CFHT 118 (MA-22)
(SJA036) □	01N85N50 LARC CFHT 118 (MA-22)
(SJA082) ◇	01N85N50 LARC CFHT 118 (MA-22)
(SJA010) △	01N85N50 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BOFLAP	BETA	REFERENCE INFORMATION		
.000	2.000	-14.250	.000	SREF	2690.0000	SQ. FT.
-30.000	2.000	.000	.000	LREF	474.8000	INCHES
-30.000	2.000	-14.250	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - PITCH, NCPM

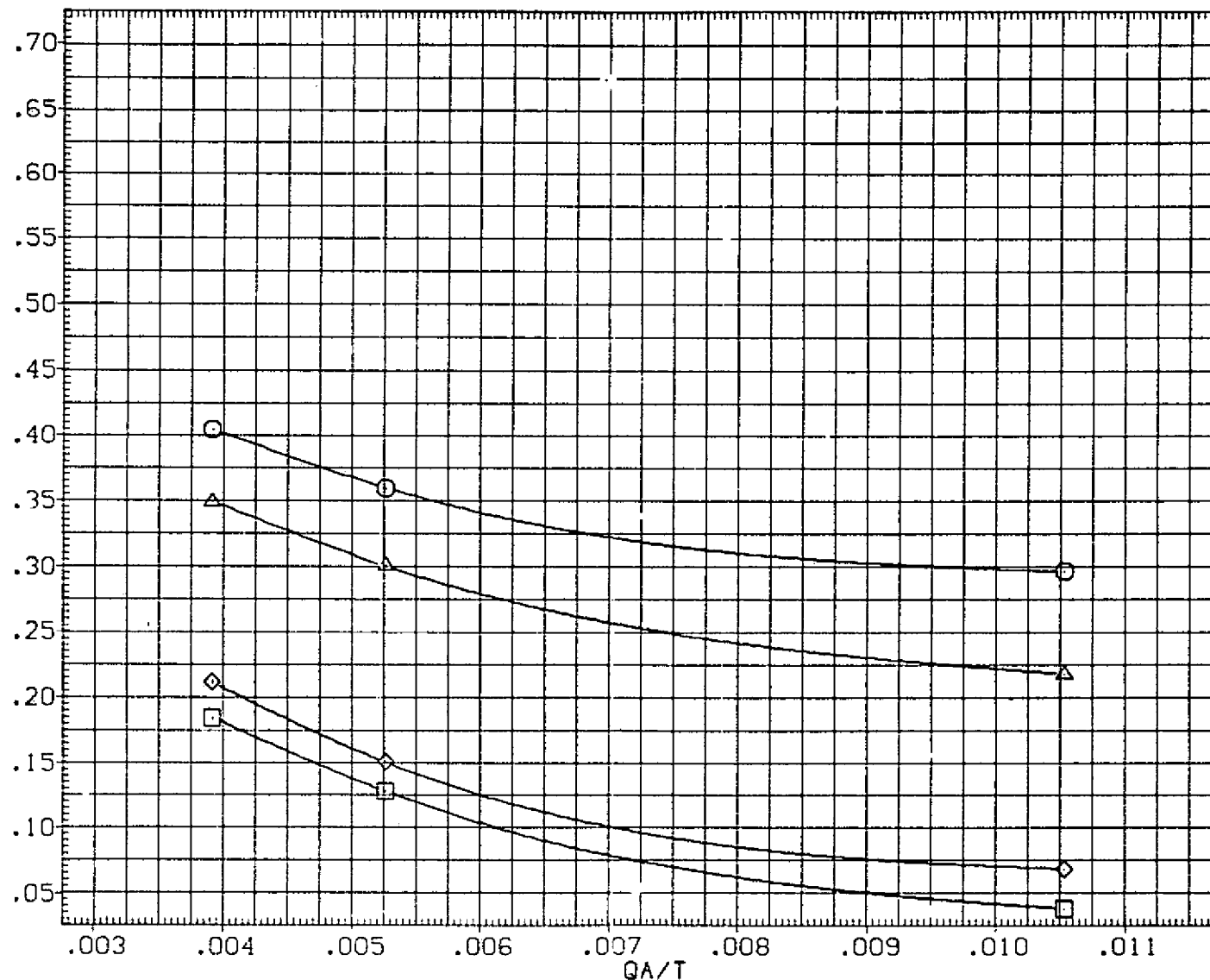


FIGURE 79. EFFECT OF ELEVON/BODY FLAP ON AMPLIFICATION FACTOR, JETS N50N85

(B) ALPHA = .00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA021)	01N85N50 LARC CFHT 118 (MA-22)
(SJA036)	01N85N50 LARC CFHT 118 (MA-22)
(SJA082)	01N85N50 LARC CFHT 118 (MA-22)
(SJA010)	01N85N50 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BDFLAP	BETA	REFERENCE INFORMATION		
.000	2.000	-14.250	.000	SREF	2690.0000	50. FT.
-30.000	2.000	.000	.000	LREF	474.8000	INCHES
-30.000	2.000	-14.250	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - PITCH, N(CPM)

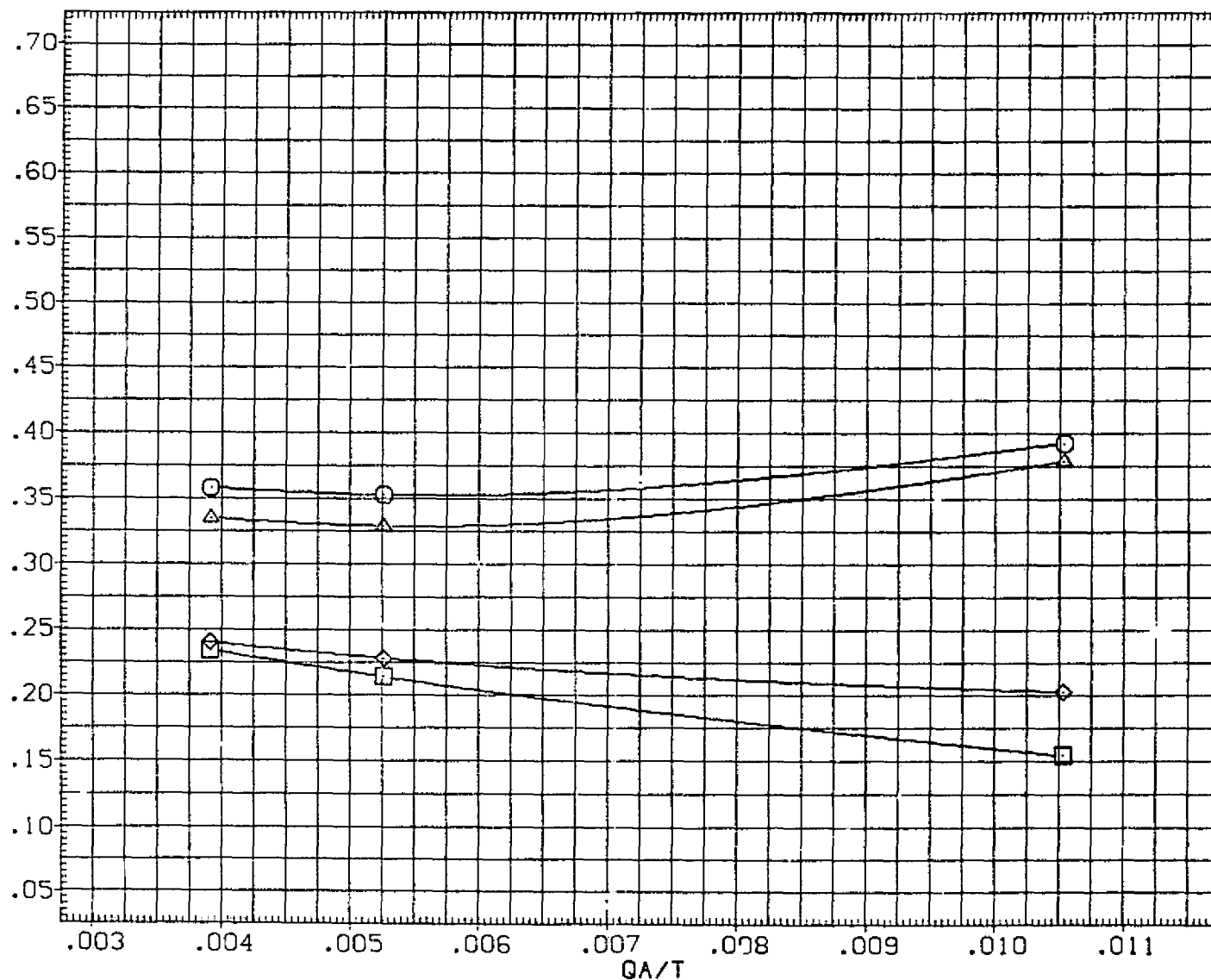


FIGURE 79. EFFECT OF ELEVON/BODY FLAP ON AMPLIFICATION FACTOR, JETS N50N85
(C) ALPHA = 10.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA021)	01N85N50 LARC CFHT 118 (MA-22)
(SJA036)	01N85N50 LARC CFHT 118 (MA-22)
(SJA082)	01N85N50 LARC CFHT 118 (MA-22)
(SJA010)	01N85N50 LARC CFHT 118 (MA-22)

ELEVON	NO.JET	BDFLAP	BETA	REFERENCE INFORMATION		
.000	2.000	-14.250	.000	SREF	2690.0000	SQ.FT.
-30.000	2.000	.000	.000	LREF	474.8000	INCHES
-30.000	2.000	-14.250	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - PITCH, N(PM)

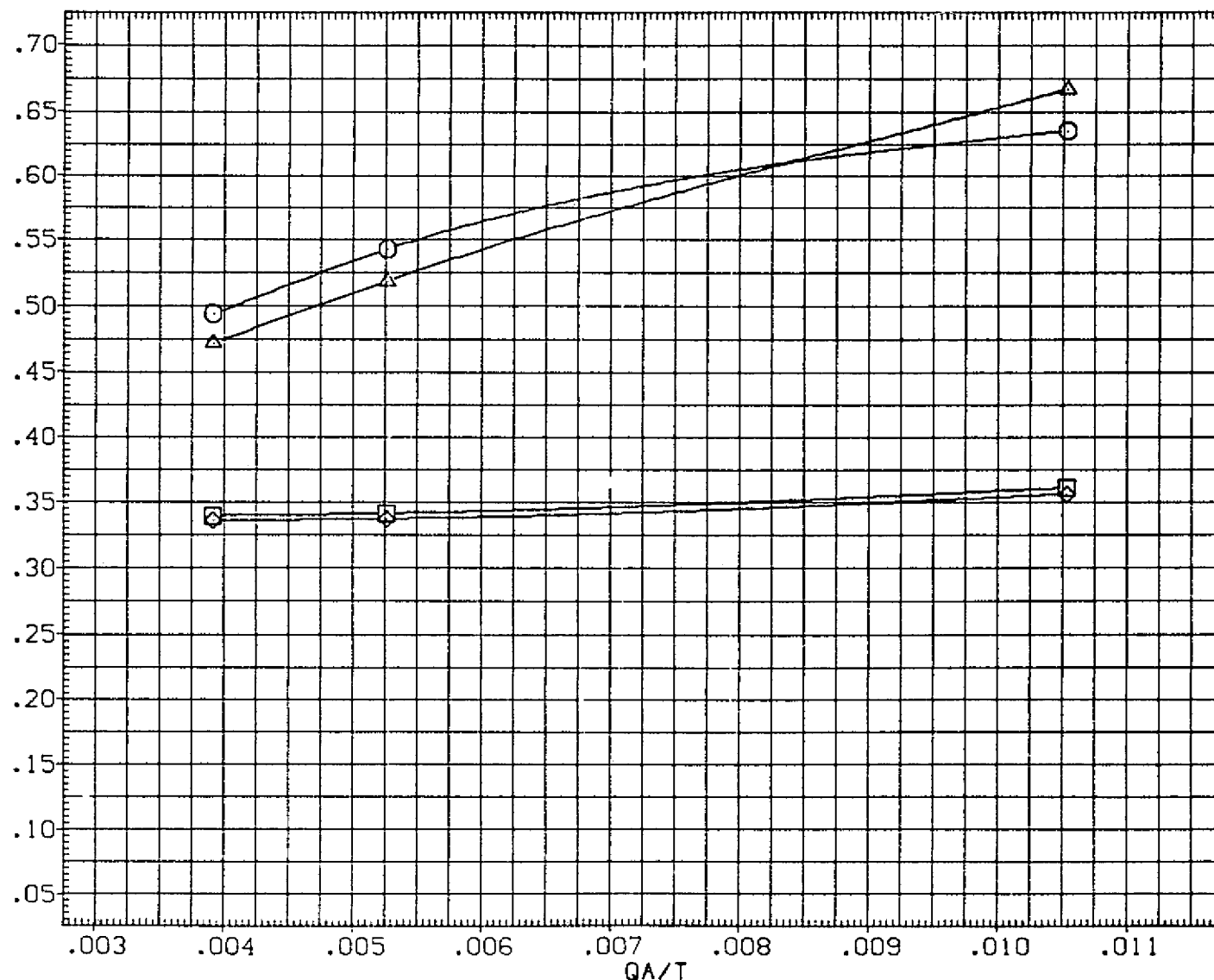


FIGURE 79. EFFECT OF ELEVON/BODY FLAP ON AMPLIFICATION FACTOR, JETS N50N85

(D) ALPHA = 20.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA021)	01N85N50 LARC CFHT 118 (MA-22)
(SJA036)	01N85N50 LARC CFHT 118 (MA-22)
(SJA082)	01N85N50 LARC CFHT 118 (MA-22)
(SJA010)	01N85N50 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BOFLAP	BETA	REFERENCE INFORMATION
.000	2.000	-14.250	.000	SREF 2690.0000 SQ. FT.
-30.000	2.000	.000	.000	LREF 474.8000 INCHES
-30.000	2.000	-14.250	.000	BREF 936.6800 INCHES
.000	2.000	.000	.000	YMRP 1076.7000 IN. YO
			.000	ZMRP .0000 IN. ZO
			.000	SCALE .0100

RCS JET AMPLIFICATION FACTOR - PITCH, N(PM)

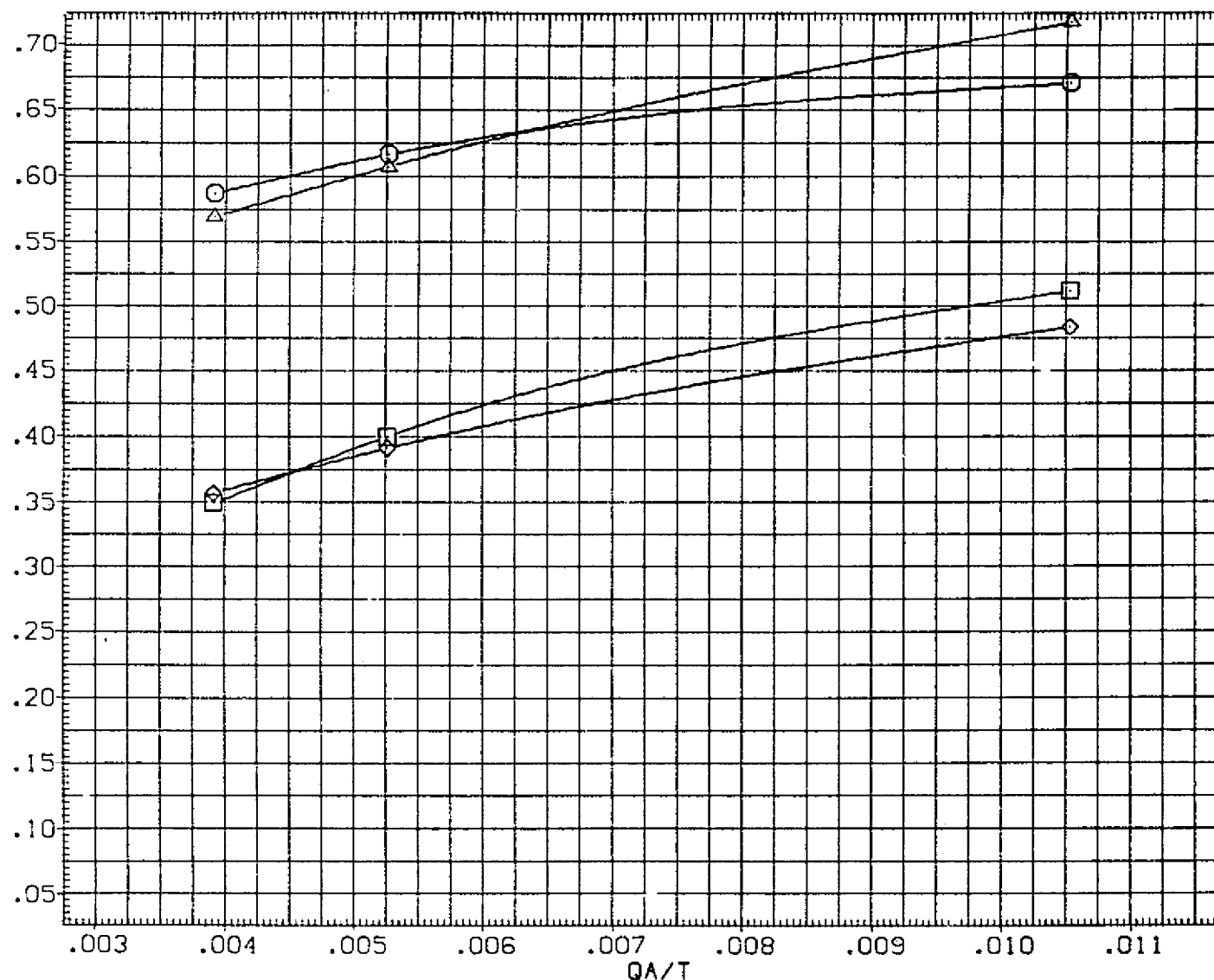


FIGURE 79. EFFECT OF ELEVON/BODY FLAP ON AMPLIFICATION FACTOR, JETS N50N85

(E) ALPHA = 35.00

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DATA SET	SYMBOL	CONFIGURATION DESCRIPTION
(SJA021)	□	01N85N50 LARC CFHT 118 (MA-22)
(SJA036)	□	01N85N50 LARC CFHT 118 (MA-22)
(SJA082)	◇	01N85N50 LARC CFHT 118 (MA-22)
(SJA010)	△	01N85N50 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BDFLAP	BETA	REFERENCE INFORMATION		
.000	2.000	-14.250	.000	SREF	2690.0000	SQ. FT.
-30.000	2.000	.000	.000	LREF	474.8000	INCHES
-30.000	2.000	-14.250	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. Y0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - AXIAL FORCE, N(AF)

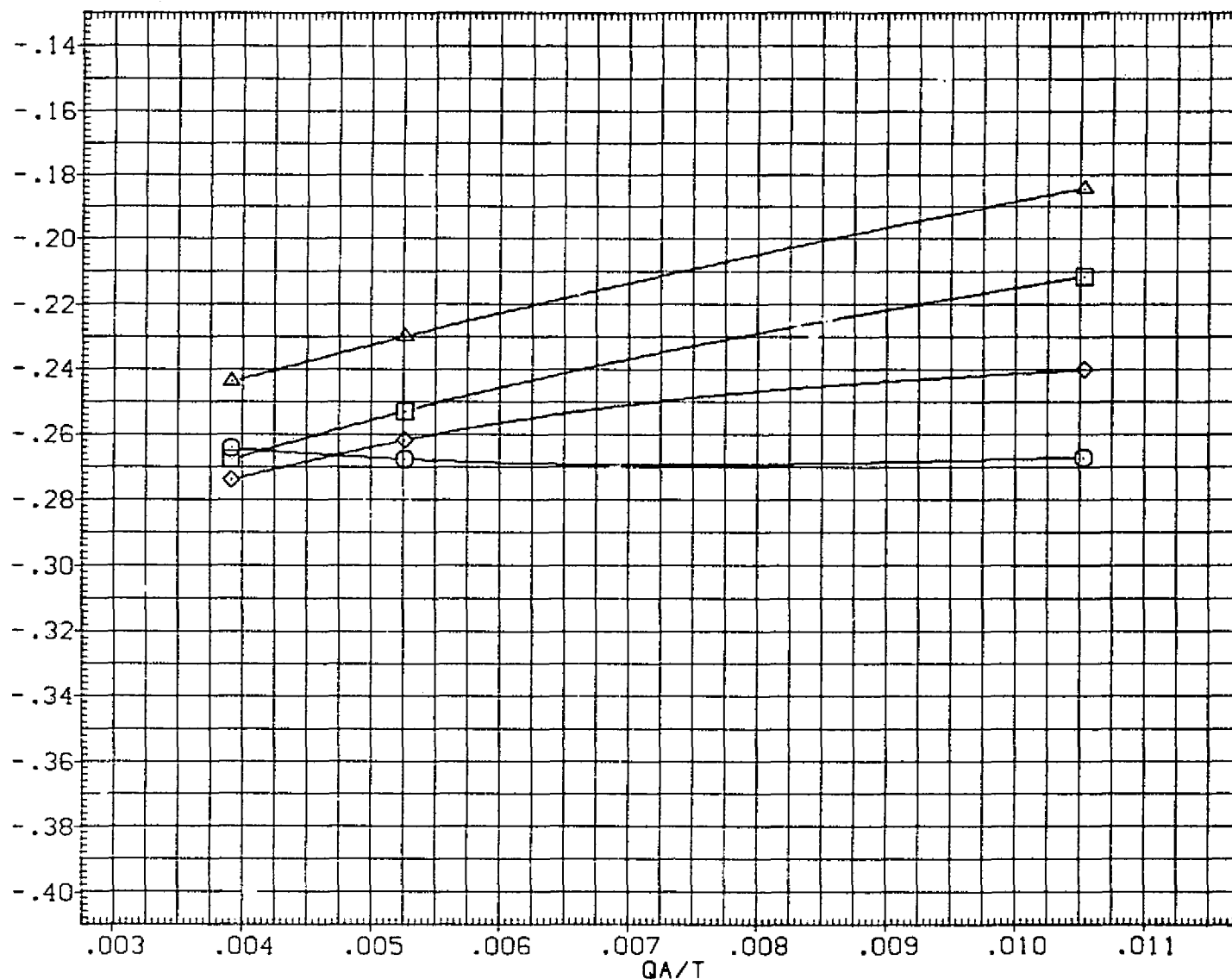


FIGURE 79. EFFECT OF ELEVON/BODY FLAP ON AMPLIFICATION FACTOR, JETS N50N85

(A) ALPHA = -8.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA021)	01N85N50 LARC CFHT 118 (MA-22)
(SJA036)	01N85N50 LARC CFHT 118 (MA-22)
(SJA082)	01N85N50 LARC CFHT 118 (MA-22)
(SJA010)	01N85N50 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BD FLAP	BETA	REFERENCE INFORMATION		
.000	2.000	-14.250	.000	SREF	2690.0000	SQ. FT.
-30.000	2.000	.000	.000	LREF	474.8000	INCHES
-30.000	2.000	-14.250	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. Y0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - AXIAL FORCE, N(AF)

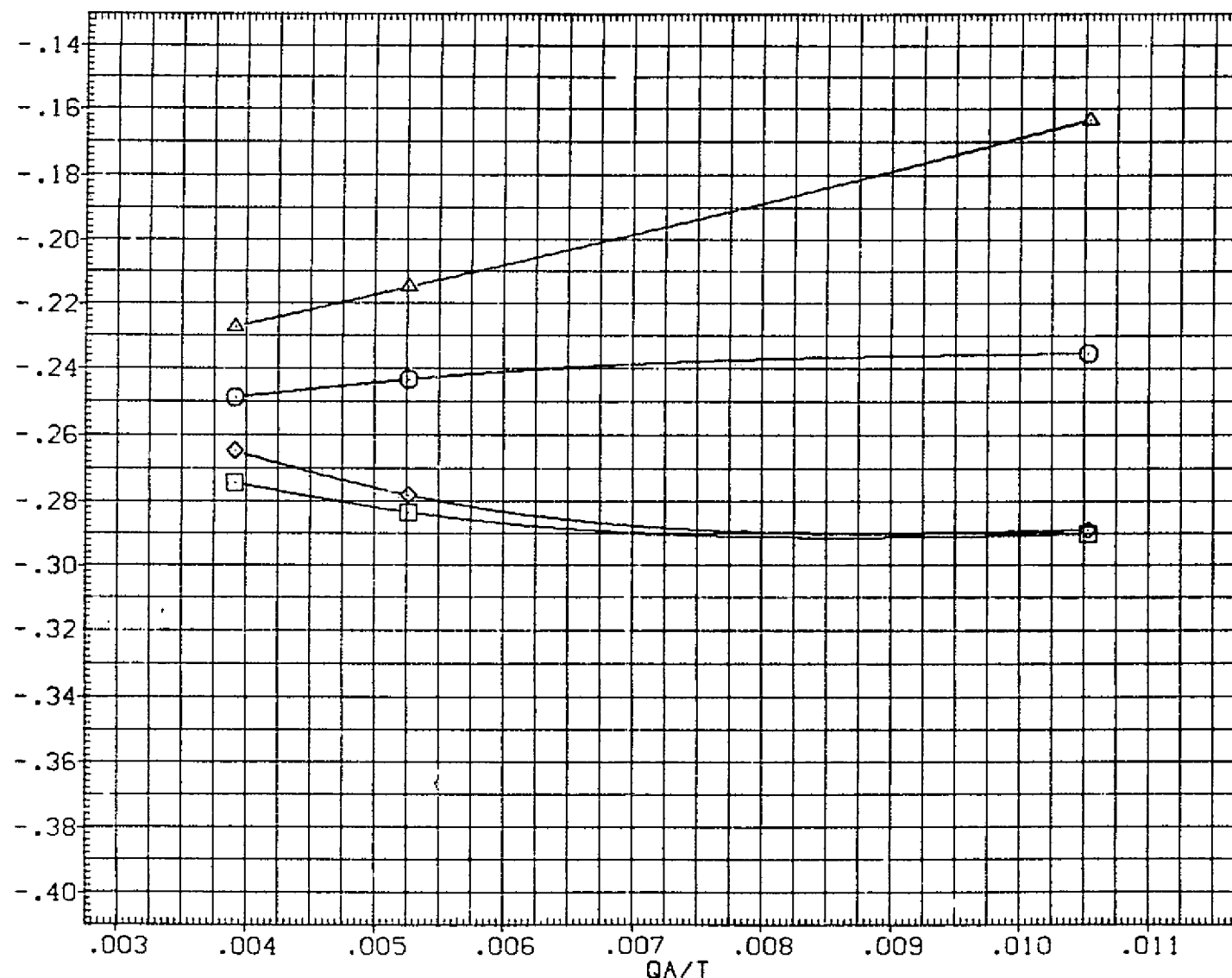


FIGURE 79. EFFECT OF ELEVON/BODY FLAP ON AMPLIFICATION FACTOR, JETS N50N85

(B) ALPHA = .00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA021)	01N85N50 LARC CFHT 118 (MA-22)
(SJA036)	01N85N50 LARC CFHT 118 (MA-22)
(SJA082)	01N85N50 LARC CFHT 118 (MA-22)
(SJA010)	01N85N50 LARC CFHT 118 (MA-22)

ELEVON	NO.JET	BDFLAP	BETA	REFERENCE INFORMATION		
.000	2.000	-14.250	.000	SREF	2690.0000	SQ.FT.
-30.000	2.000	.000	.000	LREF	474.8000	INCHES
-30.000	2.000	-14.250	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - AXIAL FORCE, N(AF)

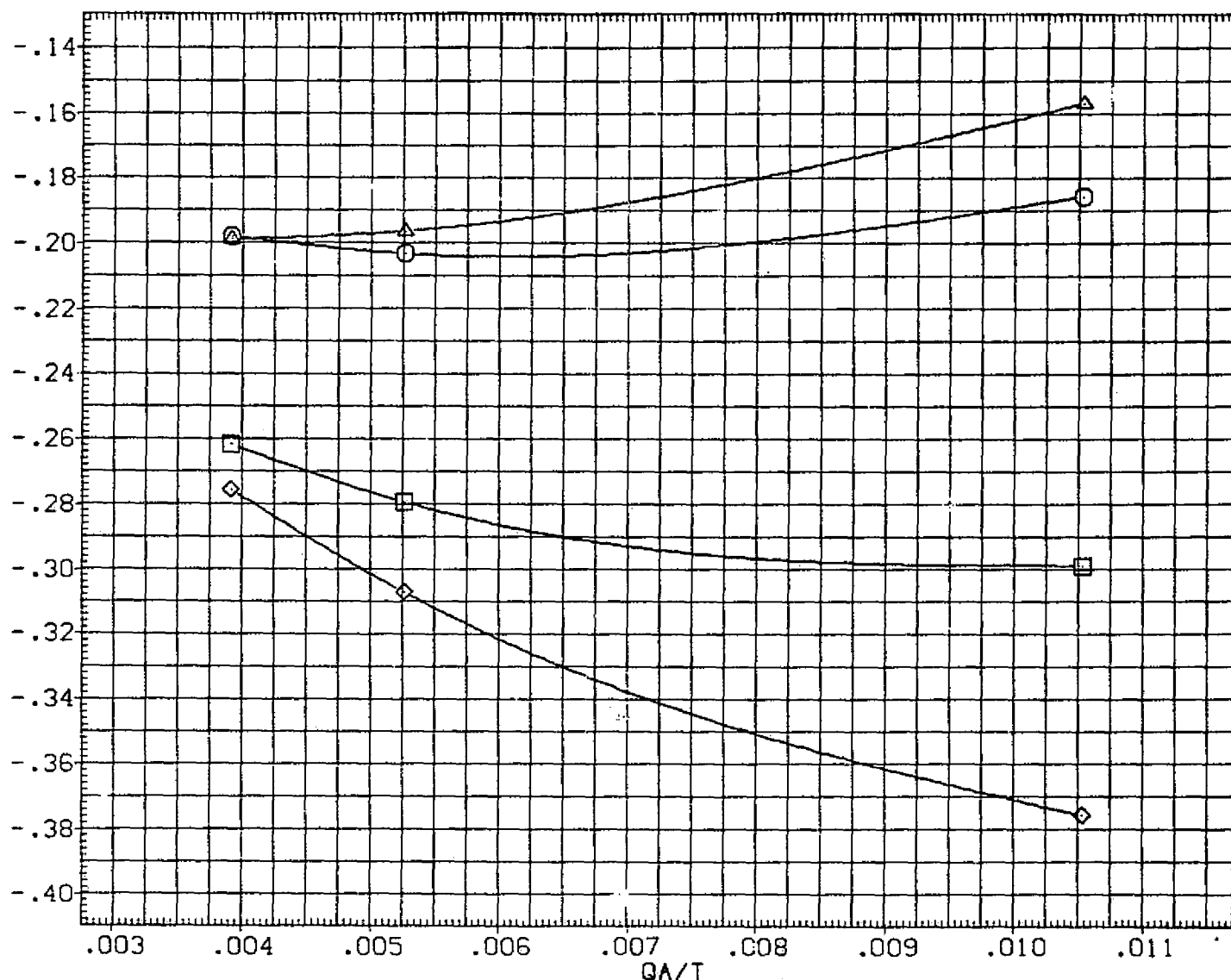


FIGURE 79. EFFECT OF ELEVON/BODY FLAP ON AMPLIFICATION FACTOR, JETS N50N85

(C) ALPHA = 10.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA021)	01N85N50 LARC CFHT 118 (MA-22)
(SJA036)	01N85N50 LARC CFHT 118 (MA-22)
(SJA082)	01N85N50 LARC CFHT 118 (MA-22)
(SJA010)	01N85N50 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BD FLAP	BETA	REFERENCE INFORMATION		
.000	2.000	-14.250	.000	SREF	2690.0000	SQ. FT.
-30.000	2.000	.000	.000	LREF	474.8000	INCHES
-30.000	2.000	-14.250	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - AXIAL FORCE, N(AF)

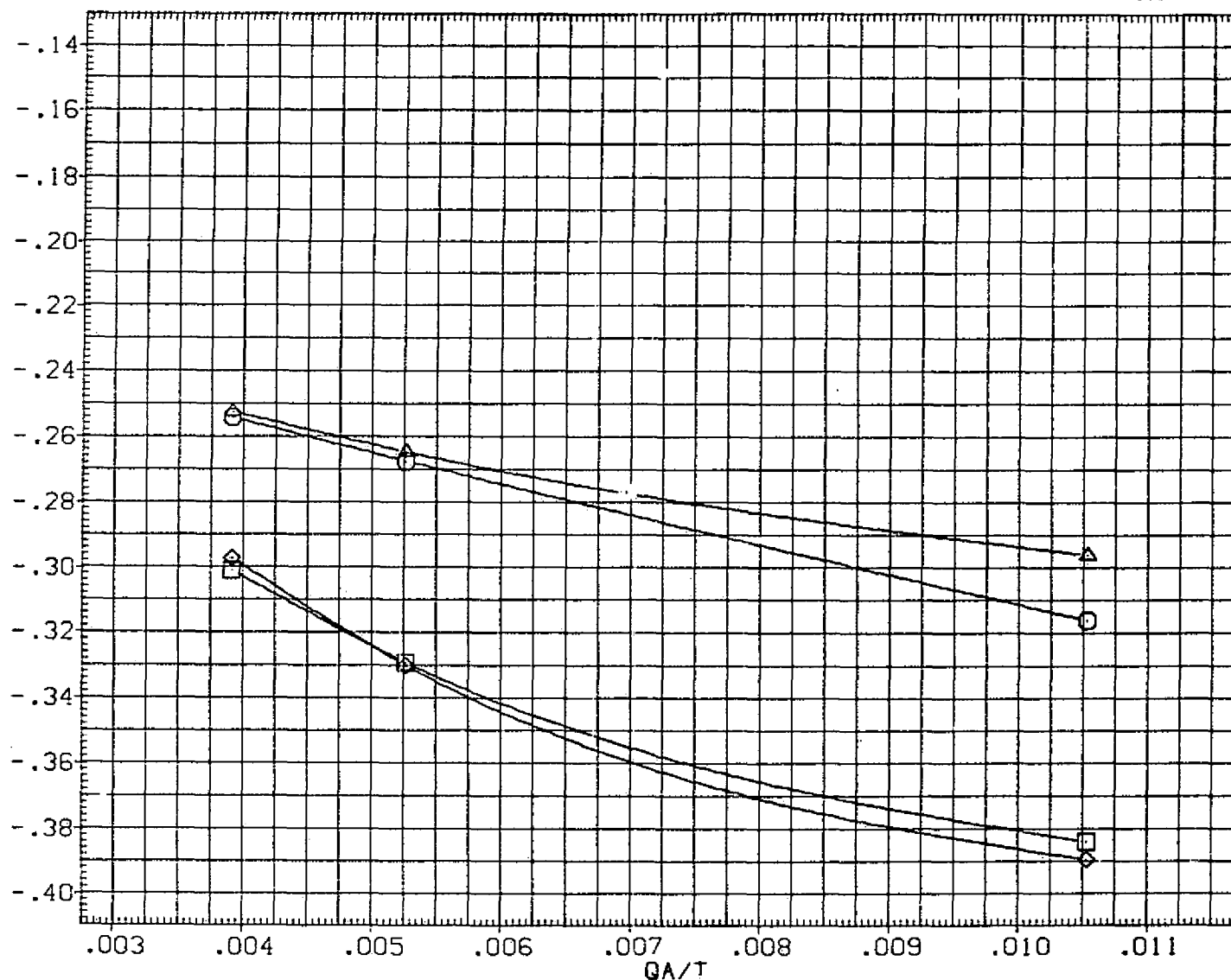


FIGURE 79. EFFECT OF ELEVON/BODY FLAP ON AMPLIFICATION FACTOR, JETS N50N85

(D) ALPHA = 20.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA021) ○	01N85N50 LARC CFHT 118 (MA-22)
(SJA036) □	01N85N50 LARC CFHT 118 (MA-22)
(SJA082) △	01N85N50 LARC CFHT 118 (MA-22)
(SJA010) ◇	01N85N50 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BD FLAP	BETA	REFERENCE INFORMATION		
.000	2.000	-14.250	.000	SREF	2690.0000	SQ. FT.
-30.000	2.000	.000	.000	LREF	474.8000	INCHES
-30.000	2.000	-14.250	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - AXIAL FORCE, N(AF)

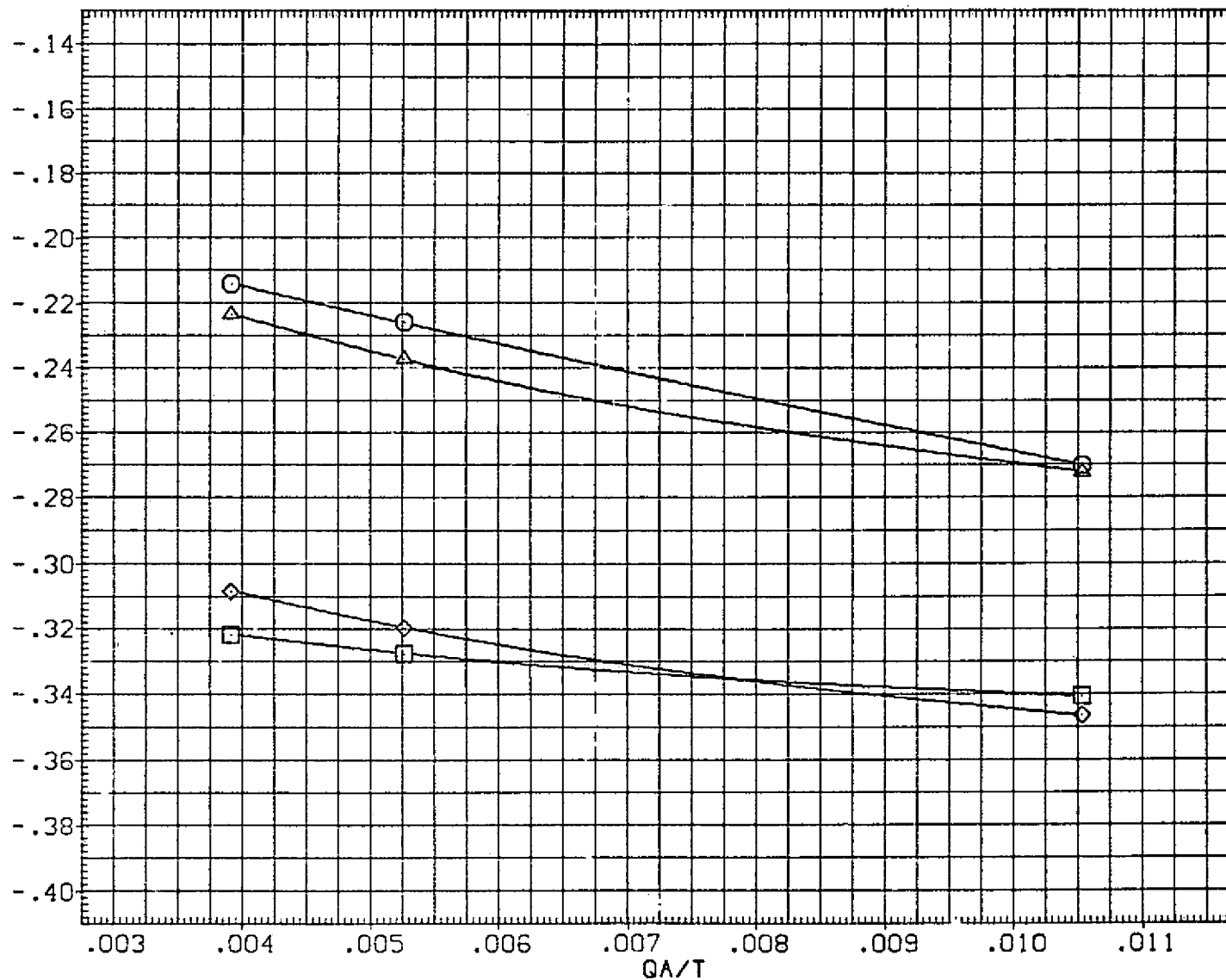


FIGURE 79. EFFECT OF ELEVON/BODY FLAP ON AMPLIFICATION FACTOR, JETS N50N85
(E) ALPHA = 35.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA021)	01N85N50 LARC CFHT 118 (MA-22)
(SJA036)	01N85N50 LARC CFHT 118 (MA-22)
(SJA082)	01N85N50 LARC CFHT 118 (MA-22)
(SJA010)	01N85N50 LARC CFHT 118 (MA-22)

ELEVON	NO.JET	BDFLAP	BETA	REFERENCE INFORMATION	
.000	2.000	-14.250	.000	SREF	2690.0000 SQ.FT.
-33.000	2.000	.000	.000	LREF	474.8000 INCHES
-30.000	2.000	-14.250	.000	BREF	936.6800 INCHES
.000	2.000	.000	.000	XMRP	1076.7000 IN. X0
				YMRP	.0000 IN. Y0
				ZMRP	375.0000 IN. Z0
				SCALE	.0100

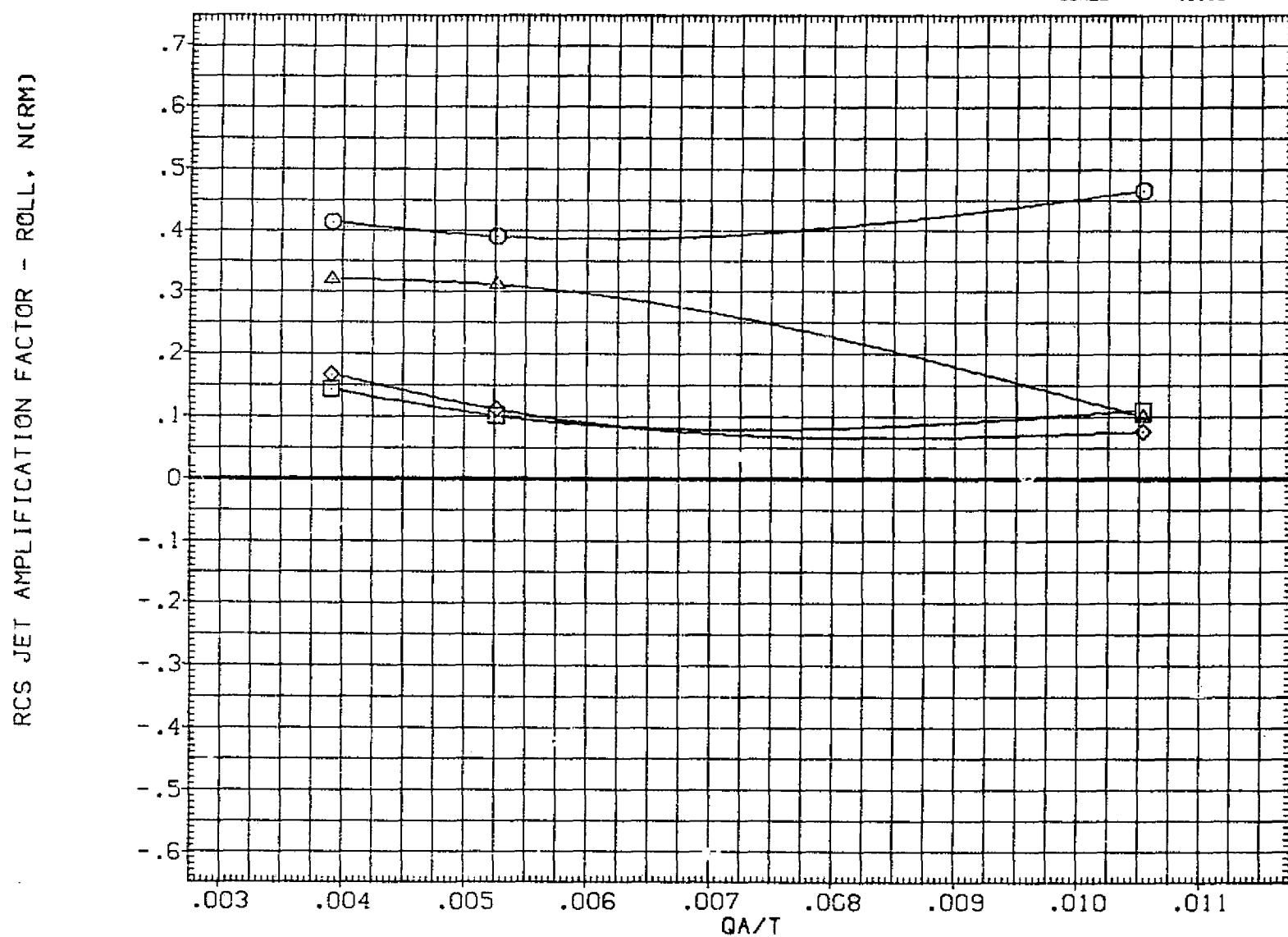


FIGURE 79. EFFECT OF ELEVON/BODY FLAP ON AMPLIFICATION FACTOR, JETS N50N85

(A) ALPHA = -8.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA021)	01N85N50 LARC CFHT 118 (MA-22)
(SJA036)	01N85N50 LARC CFHT 118 (MA-22)
(SJA082)	01N85N50 LARC CFHT 118 (MA-22)
(SJA010)	01N85N50 LARC CFHT 118 (MA-22)

ELEVON	NO.JET	BDFLAP	BETA	REFERENCE INFORMATION		
.000	2.000	-14.250	.000	SREF	2690.0000	SG.FT.
-30.000	2.000	.000	.000	LREF	474.8000	INCHES
-30.000	2.000	-14.250	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - ROLL, N(RM)

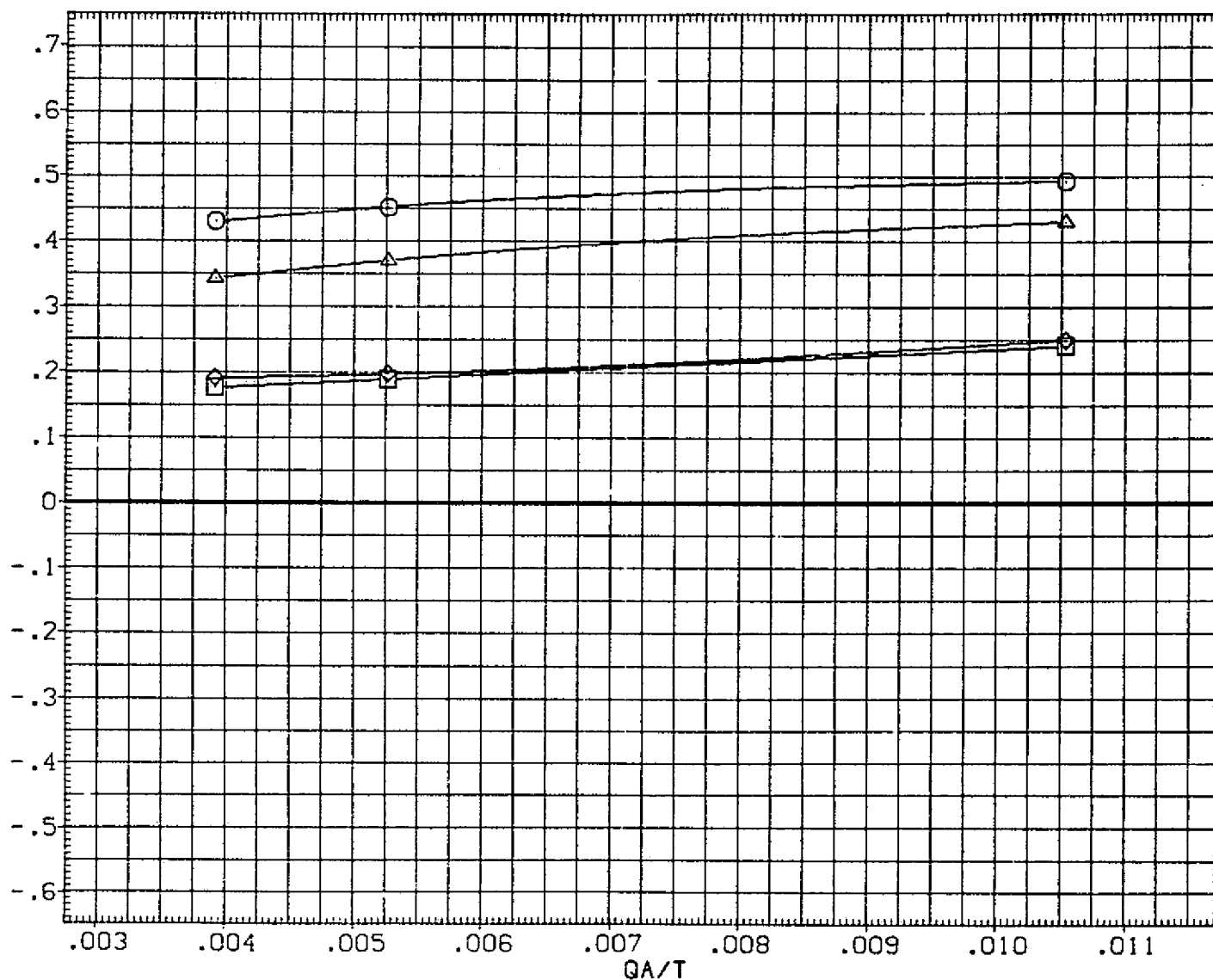


FIGURE 79. EFFECT OF ELEVON/BODY FLAP ON AMPLIFICATION FACTOR, JETS N50N85

(B) ALPHA = .00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA021)	01N85N50 LARC CFHT 118 (MA-22)
(SJA036)	01N85N50 LARC CFHT 118 (MA-22)
(SJA082)	01N85N50 LARC CFHT 118 (MA-22)
(SJA010)	01N85N50 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BOFLAP	BETA	REFERENCE INFORMATION		
.000	2.000	-14.250	.000	SREF	2690.0000	50. FT.
-30.000	2.000	.000	.000	LREF	474.8000	INCHES
-30.000	2.000	-14.250	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - ROLL, N(RM)

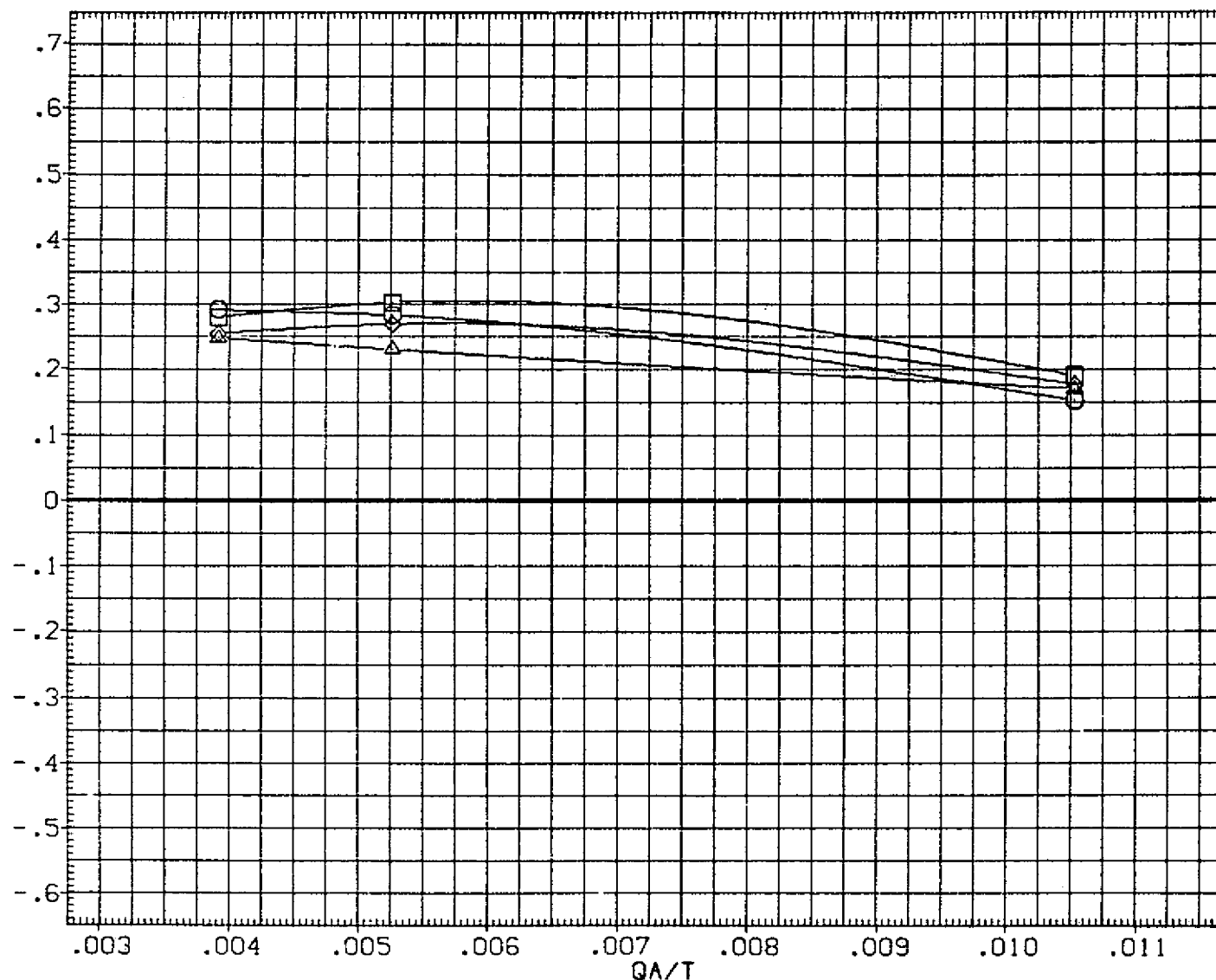


FIGURE 79. EFFECT OF ELEVON/BODY FLAP ON AMPLIFICATION FACTOR, JETS N50N85

(C) ALPHA = 10.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA021)	01N85N50 LARC CFHT 118 (MA-22)
(SJA036)	01N85N50 LARC CFHT 118 (MA-22)
(SJA082)	01N85N50 LARC CFHT 118 (MA-22)
(SJA010)	01N85N50 LARC CFHT 118 (MA-22)

ELEVON	NO.JET	BOFLAP	BETA	REFERENCE INFORMATION
.000	2.000	-14.250	.000	SREF 2690.0000 SQ.FT.
-30.000	2.000	.000	.000	LREF 474.8000 INCHES
-30.000	2.000	-14.250	.000	BREF 936.6800 INCHES
.000	2.000	.000	.000	XMRP 1076.7000 IN. X0
				YMRP .0000 IN. Y0
				ZMRP 375.0000 IN. Z0
				SCALE .0100

RCS JET AMPLIFICATION FACTOR - ROLL, N(RM)

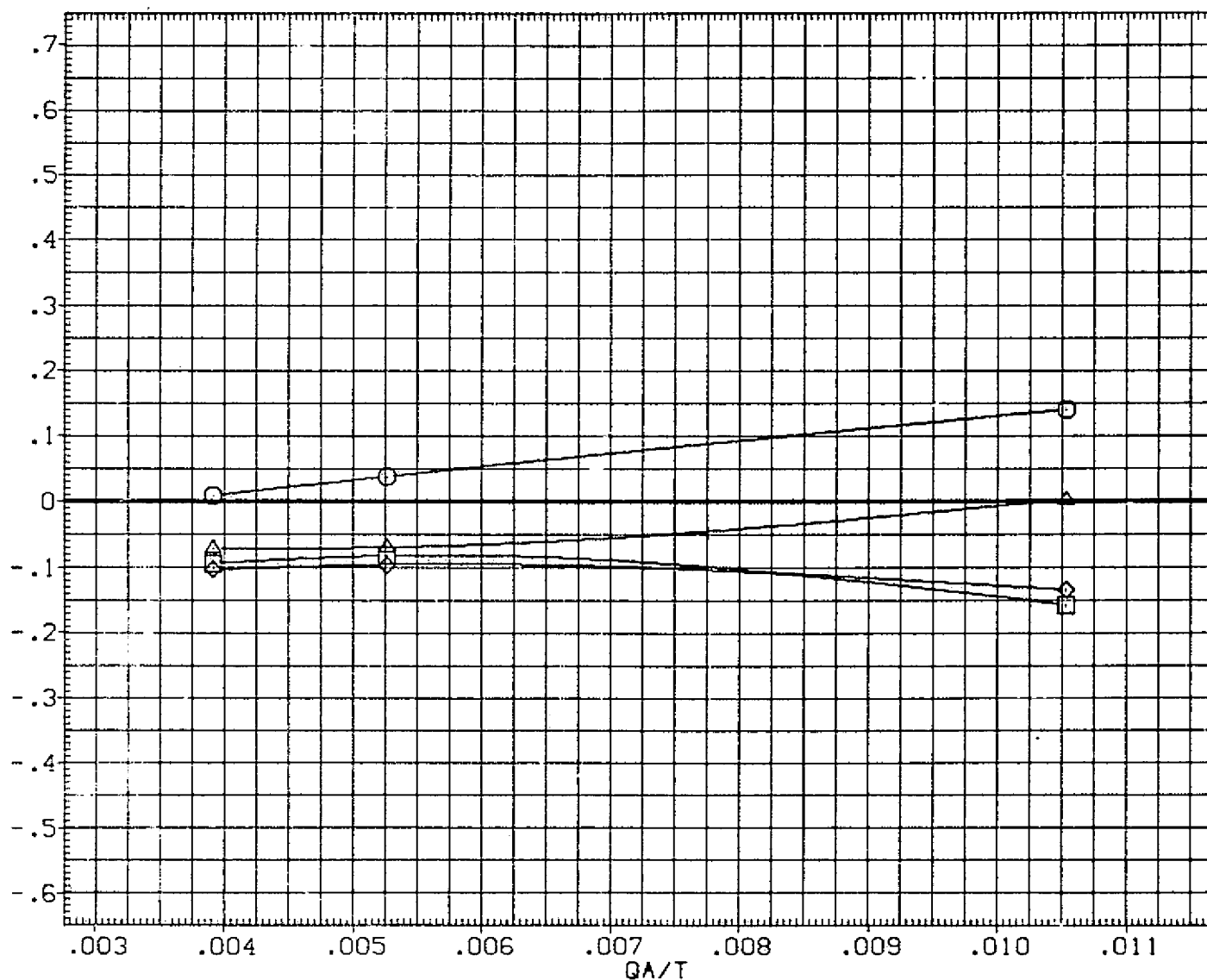


FIGURE 79. EFFECT OF ELEVON/BODY FLAP ON AMPLIFICATION FACTOR, JETS N50N85

(D) ALPHA = 20.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA021)	01N85N50 LARC CFHT 118 (MA-22)
(SJA022)	01N85N50 LARC CFHT 118 (MA-22)
(SJA023)	01N85N50 LARC CFHT 118 (MA-22)
(SJA024)	01N85N50 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BD FLAP	BETA	REFERENCE INFORMATION
.000	2.000	-14.250	.000	SREF 2690.0000 SQ. FT.
-30.000	2.000	.000	.000	LREF 474.8000 INCHES
-30.000	2.000	-14.250	.000	BREF 936.6800 INCHES
.000	2.000	.000	.000	XMRP 1076.7000 IN. X0
				YMRP .0000 IN. Y0
				ZMRP 375.0000 IN. Z0
				SCALE .0100

RCS JET AMPLIFICATION FACTOR - ROLL, NCRM

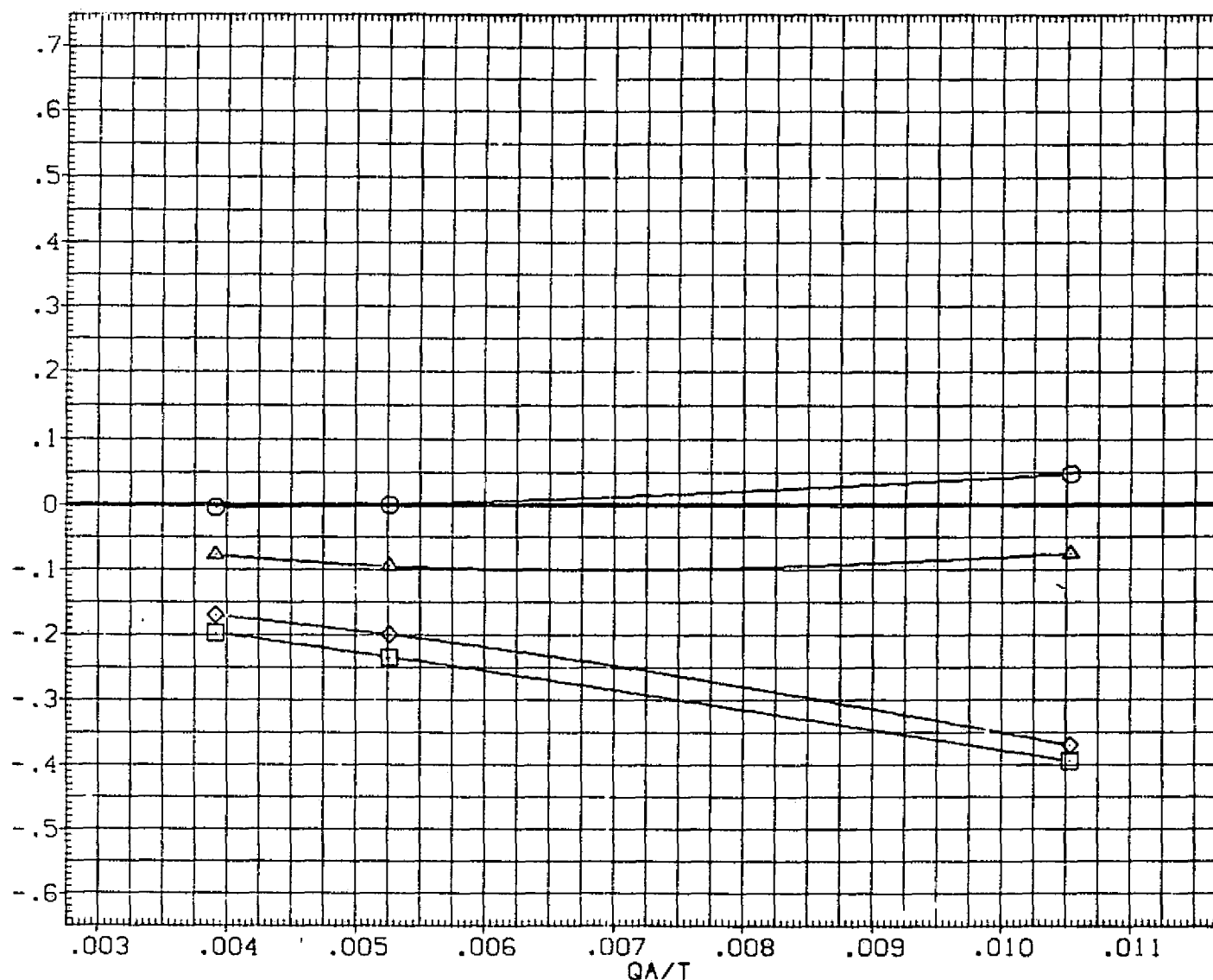


FIGURE 79. EFFECT OF ELEVON/BODY FLAP ON AMPLIFICATION FACTOR, JETS N50N85

(E) ALPHA = 35.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA021)	01N85N50 LARC CFHT 118 (MA-22)
(SJA036)	01N85N50 LARC CFHT 118 (MA-22)
(SJA082)	01N85N50 LARC CFHT 118 (MA-22)
(SJA010)	01N85N50 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BD FLAP	BETA	REFERENCE INFORMATION
.000	2.000	-14.250	.000	SREF 2690.0000 SQ. FT.
-30.000	2.000	.000	.000	LREF 474.8000 INCHES
-30.000	2.000	-14.250	.000	BREF 936.6800 INCHES
.000	2.000	.000	.000	XMRP 1076.7000 IN. X0
				YMRP .0000 IN. Y0
				ZMRP 375.0000 IN. Z0
				SCALE .0100

RCS JET AMPLIFICATION FACTOR - YAW, N(YM)

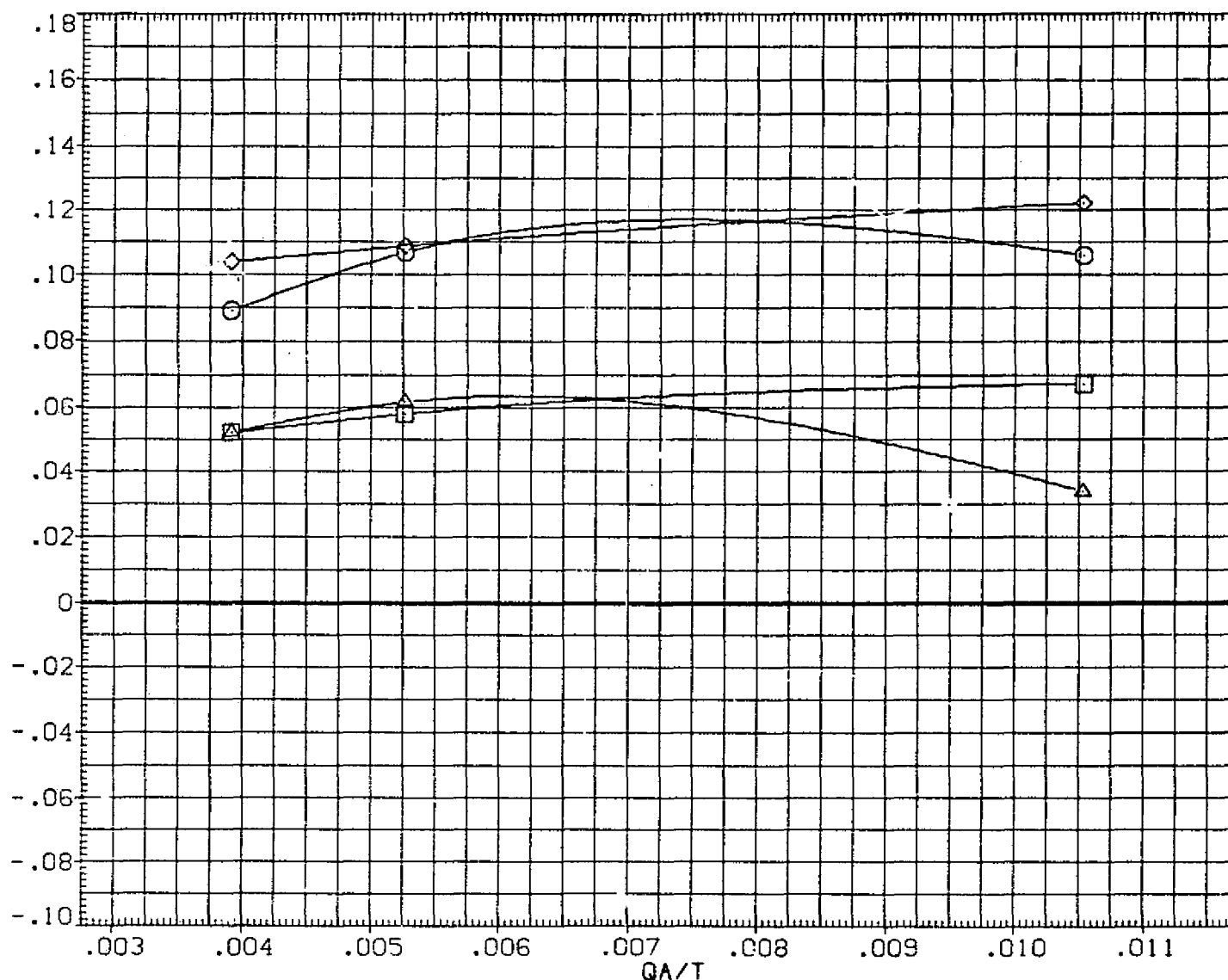


FIGURE 79. EFFECT OF ELEVON/BODY FLAP ON AMPLIFICATION FACTOR, JETS N50N85

(A) ALPHA = -8.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA021)	01N85N50 LARC CFHT 118 (MA-22)
(SJA036)	01N85N50 LARC CFHT 118 (MA-22)
(SJA082)	01N85N50 LARC CFHT 118 (MA-22)
(SJA010)	01N85N50 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BDFLAP	BETA	REFERENCE INFORMATION		
.000	2.000	-14.250	.000	SREF	2690.0000	SQ. FT.
-30.000	2.000	.000	.000	LREF	474.8000	INCHES
-30.000	2.000	-14.250	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - YAW, N(°)

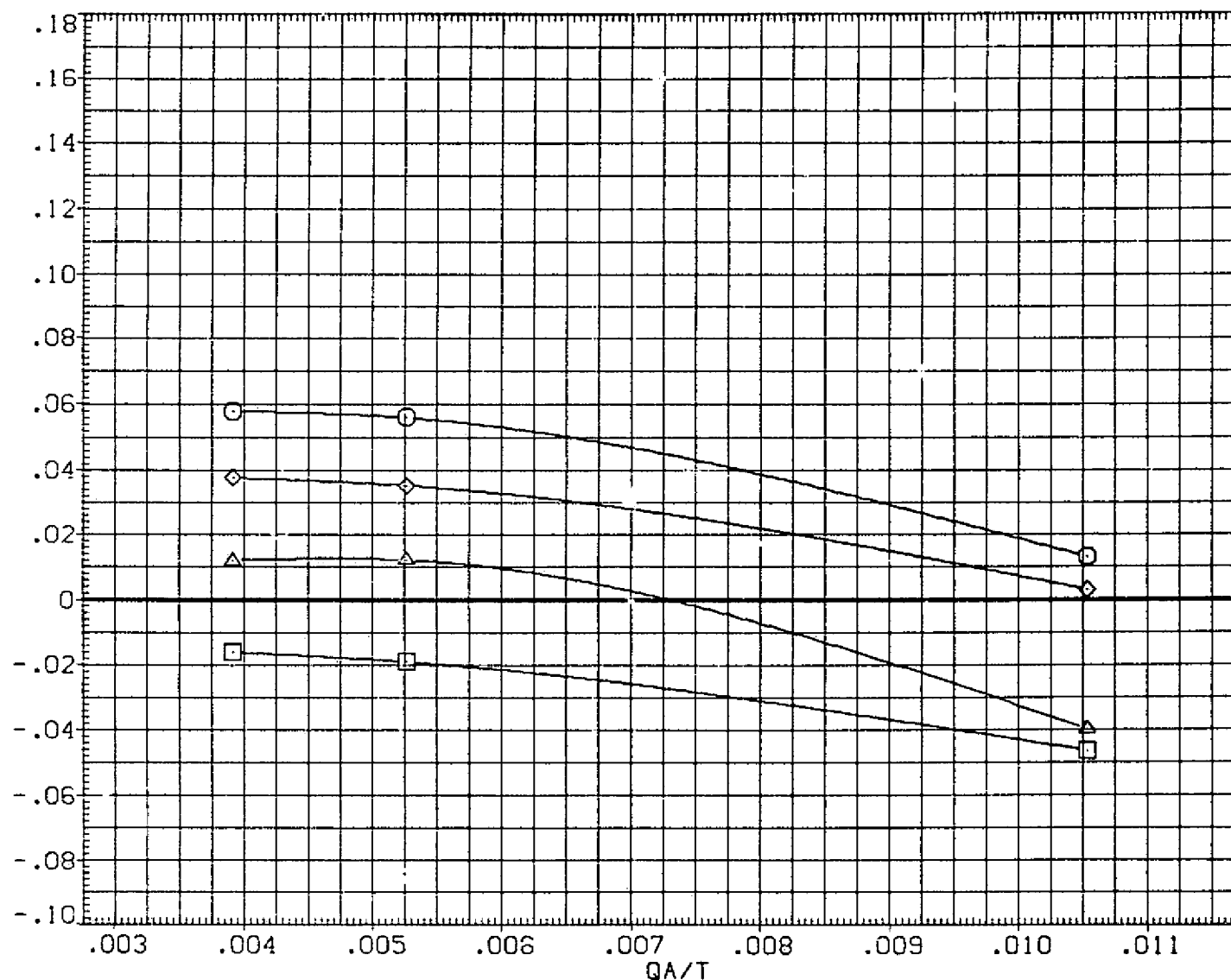


FIGURE 79. EFFECT OF ELEVON/BODY FLAP ON AMPLIFICATION FACTOR, JETS N50N85

(B) ALPHA = .00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA021) ○	01N85N50 LARC CFHT 118 (MA-22)
(SJA036) □	01N85N50 LARC CFHT 118 (MA-22)
(SJA082) ◇	01N85N50 LARC CFHT 118 (MA-22)
(SJA010) △	01N85N50 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BDFLAP	BETA	REFERENCE INFORMATION		
.000	2.000	-14.250	.000	SREF	2690.0000	50.FT.
-30.000	2.000	.000	.000	LREF	474.8000	INCHES
-30.000	2.000	-14.250	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XMPP	1076.7000	IN. X0
				YMPP	.0000	IN. Y0
				ZMPP	375.0000	IN. Z0
				SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - YAW, N(YM)

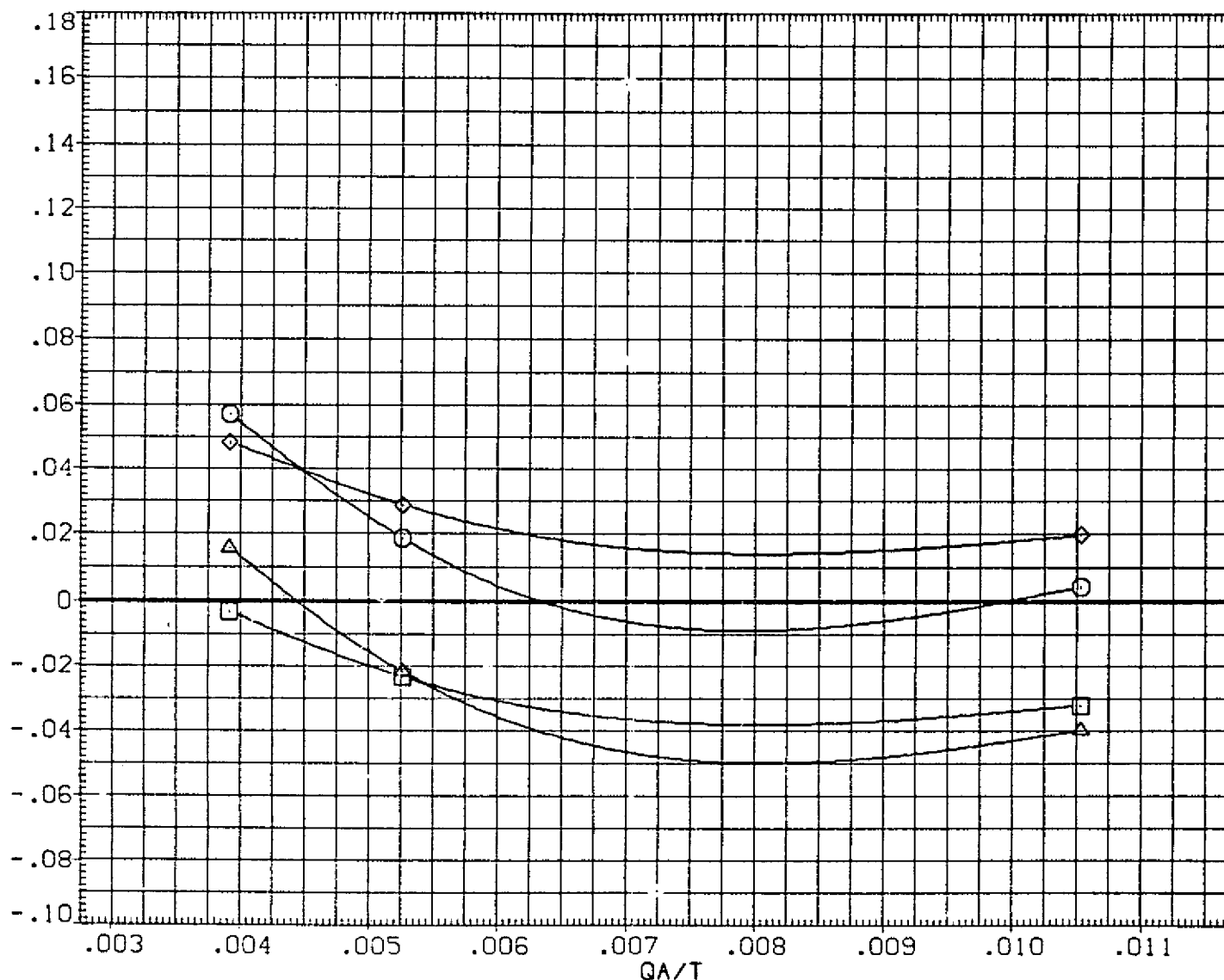


FIGURE 79. EFFECT OF ELEVON/BODY FLAP ON AMPLIFICATION FACTOR, JETS N50N85
(C) ALPHA = 10.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA021)	01N85N50 LARC CFHT 118 (MA-22)
(SJA036)	01N85N50 LARC CFHT 118 (MA-22)
(SJA082)	01N85N50 LARC CFHT 118 (MA-22)
(SJA010)	01N85N50 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BD FLAP	BETA	REFERENCE INFORMATION		
.000	2.000	-14.250	.000	SREF	2690.0000	SQ. FT.
-30.000	2.000	.000	.000	LREF	474.8000	INCHES
-30.000	2.000	-14.250	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - YAW, N(°)

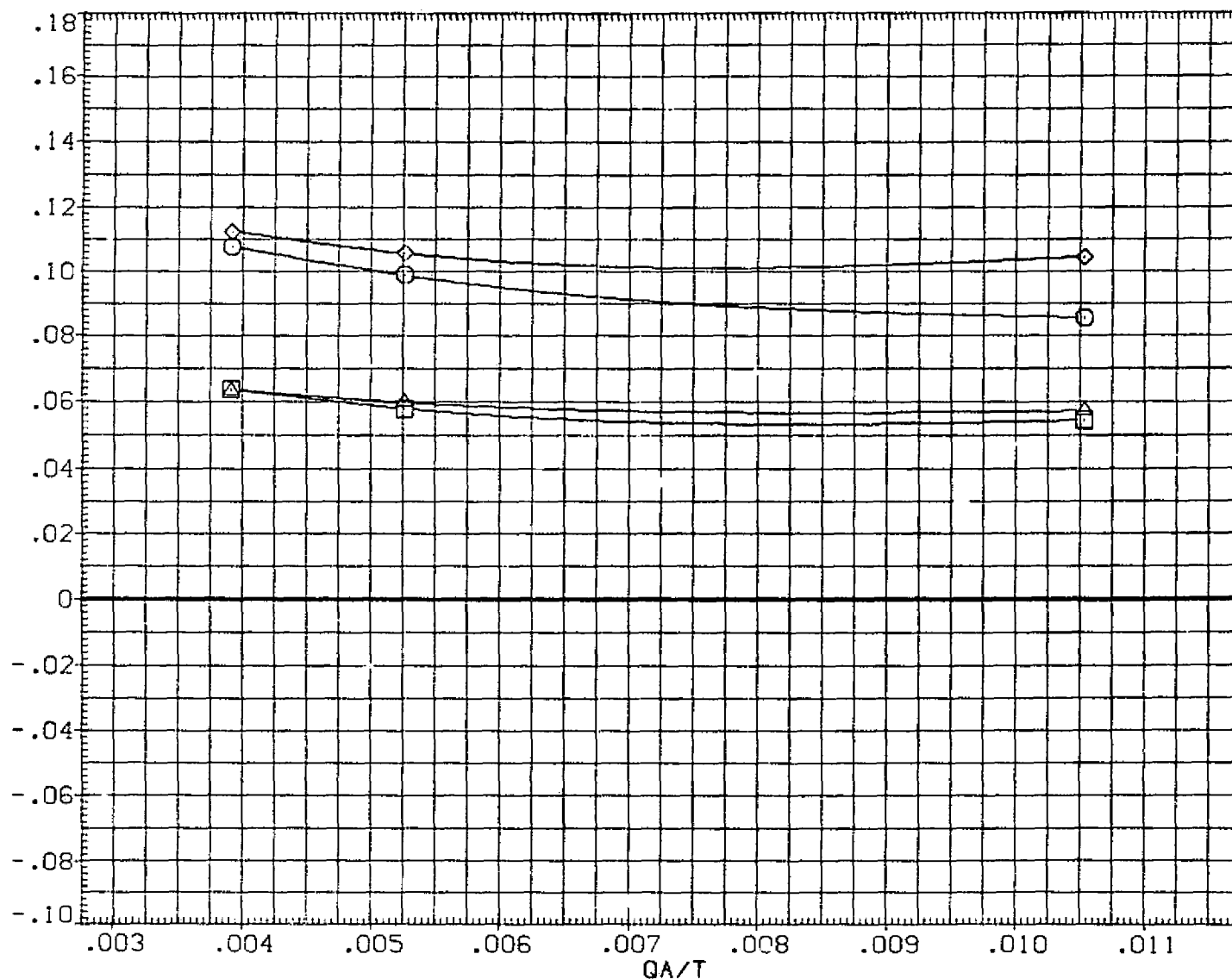


FIGURE 79. EFFECT OF ELEVON/BODY FLAP ON AMPLIFICATION FACTOR, JETS N50N85

(O) ALPHA = 20.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA021)	01N85N50 LARC CFHT 118 (MA-22)
(SJA036)	01N85N50 LARC CFHT 118 (MA-22)
(SJA082)	01N85N50 LARC CFHT 118 (MA-22)
(SJA010)	01N85N50 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BD FLAP	BETA	REFERENCE INFORMATION
.000	2.000	-14.250	.000	SREF 2690.0000 SQ.FT.
-30.000	2.000	.000	.000	LREF 474.8000 INCHES
-30.000	2.000	-14.250	.000	BREF 936.6800 INCHES
.000	2.000	.000	.000	XMRP 1076.7000 IN. X0
				YMRP .0000 IN. Y0
				ZMRP 375.0000 IN. Z0
				SCALE .0100

RCS JET AMPLIFICATION FACTOR - YAW, N(YM)

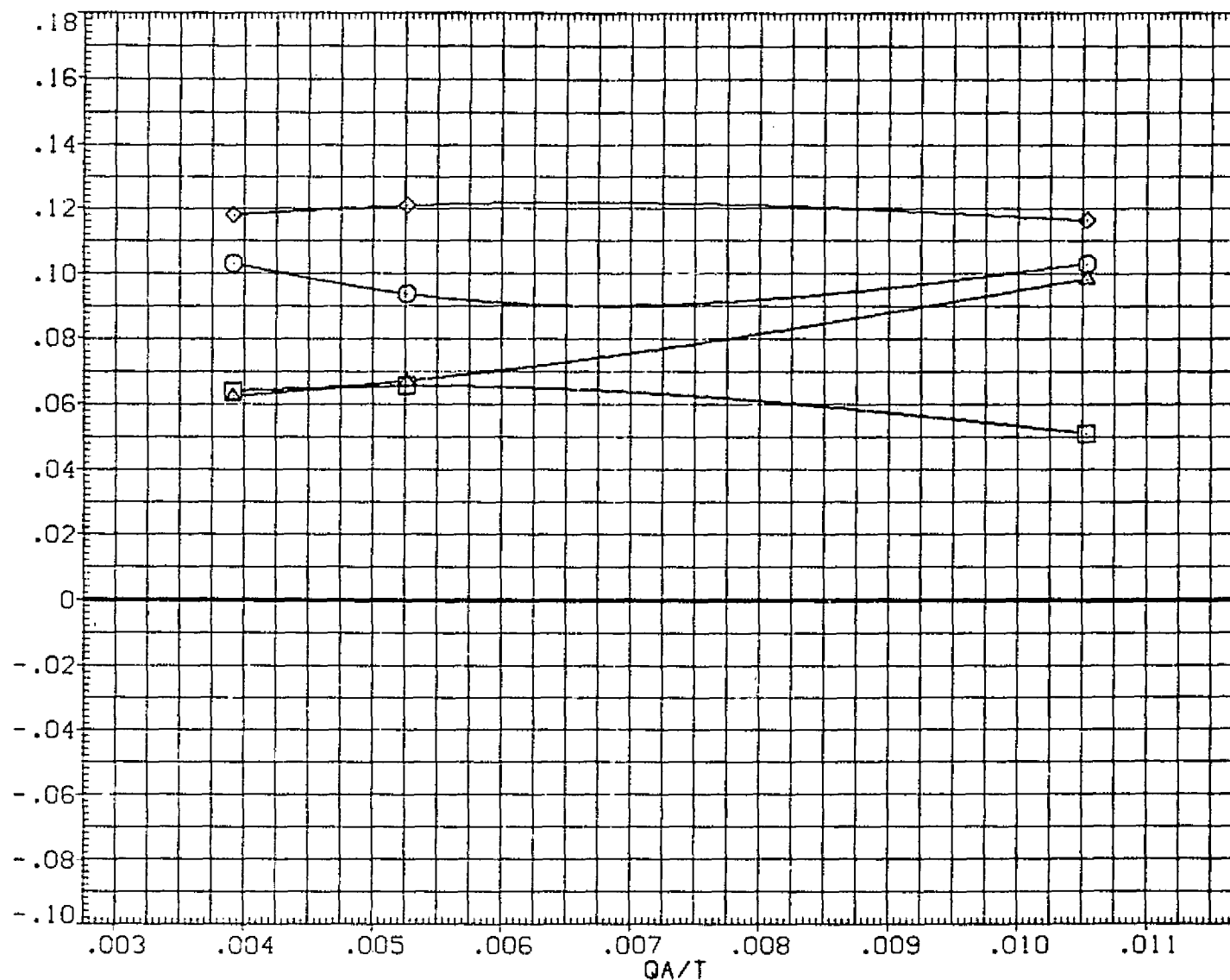


FIGURE 79. EFFECT OF ELEVON/BODY FLAP ON AMPLIFICATION FACTOR, JETS N50N85
(E) ALPHA = 35.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA021)	01N85N50 LARC CFHT 118 (MA-22)
(SJA036)	01N85N50 LARC CFHT 118 (MA-22)
(SJA082)	01N85N50 LARC CFHT 118 (MA-22)
(SJA010)	01N85N50 LARC CFHT 118 (MA-22)

ELEVON	NO.JET	BOFLAP	BETA	REFERENCE INFORMATION		
.000	2.000	-14.250	.000	SREF	2690.0000	50.FT.
-30.000	2.000	.000	.000	LREF	474.8000	INCHES
-30.000	2.000	-14.250	.000	BREF	936.6600	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - SIDE FORCE, NCSF)

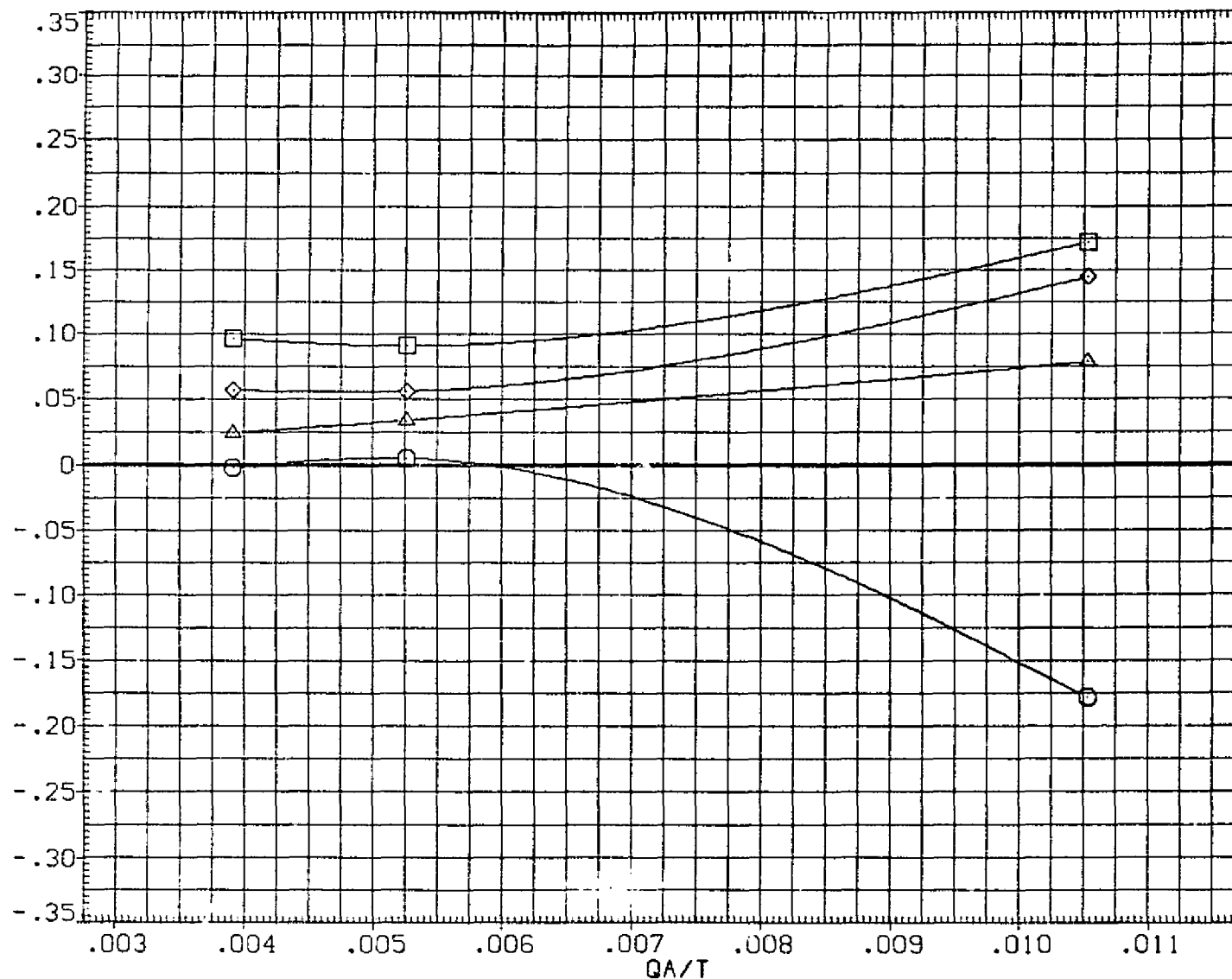


FIGURE 79. EFFECT OF ELEVON/BODY FLAP ON AMPLIFICATION FACTOR, JETS N50N85

(A) ALPHA = -8.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA021)	01N85N50 LARC CFHT 118 (MA-22)
(SJA036)	01N85N50 LARC CFHT 118 (MA-22)
(SJA082)	01N85N50 LARC CFHT 118 (MA-22)
(SJA010)	01N85N50 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BD FLAP	BETA	REFERENCE INFORMATION
.000	2.000	-14.250	.000	SREF 2690.0000 SQ. FT.
-30.000	2.000	.000	.000	LREF 474.8000 INCHES
-30.000	2.000	-14.250	.000	BREF 936.6800 INCHES
.000	2.000	.000	.000	XMRP 1076.7000 IN. X0
				YMRP .0000 IN. Y0
				ZMRP 375.0000 IN. Z0
				SCALE .0100

RCS JET AMPLIFICATION FACTOR - SIDE FORCE, N(SF)

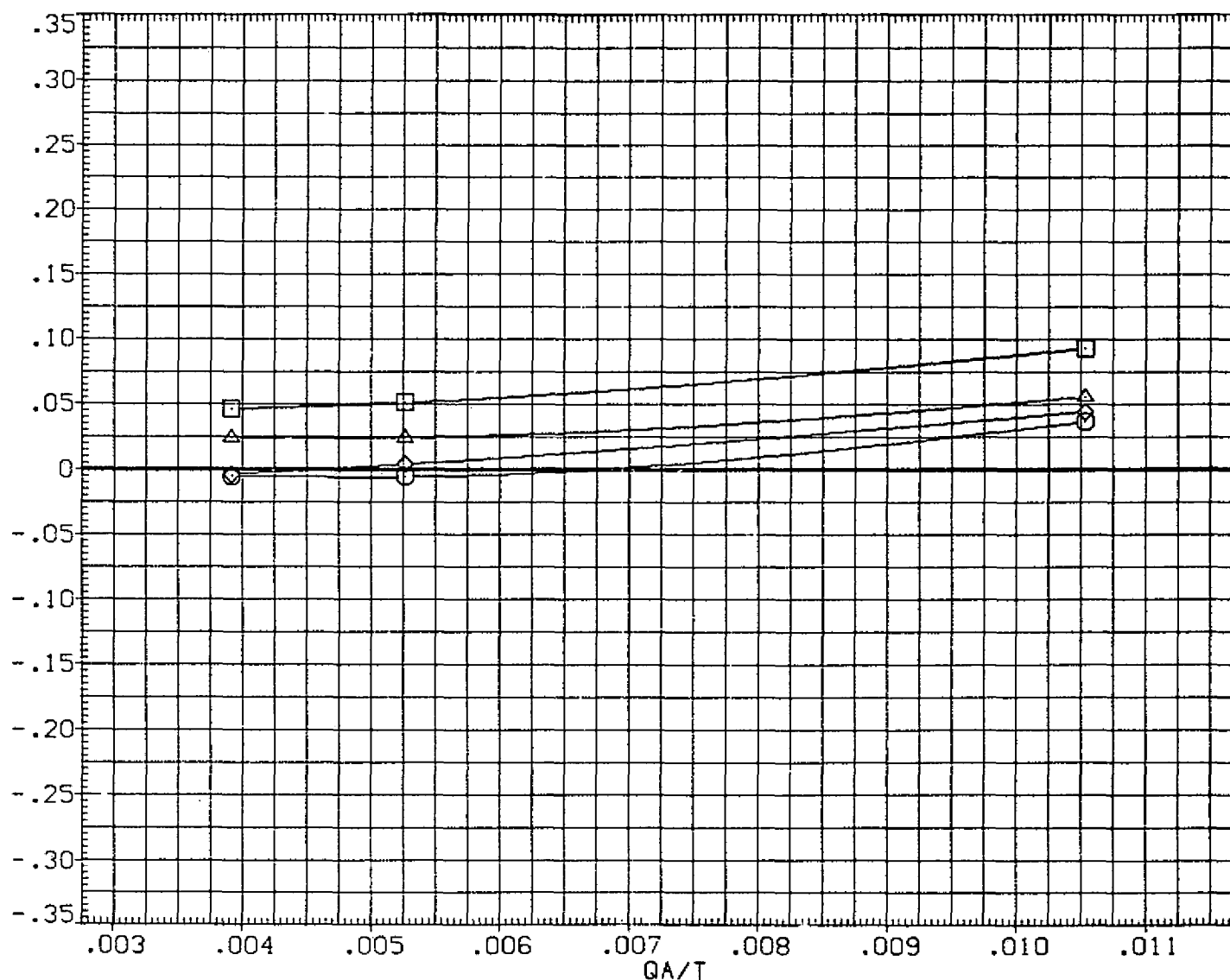


FIGURE 79. EFFECT OF ELEVON/BODY FLAP ON AMPLIFICATION FACTOR, JETS N50N85
(B) ALPHA = .00

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION
(SJA021)	□	01N85N50 LARC CFHT 118 (MA-22)
(SJA036)	○	01N85N50 LARC CFHT 118 (MA-22)
(SJA082)	◇	01N85N50 LARC CFHT 118 (MA-22)
(SJA010)	△	01N85N50 LARC CFHT 118 (MA-22)

ELEVON	N3.JET	BDFLAP	BETA	REFERENCE INFORMATION		
.000	2.000	-14.250	.000	SREF	2690.0000	SG.FT.
-30.000	2.000	.000	.000	LREF	474.8000	INCHES
-30.000	2.000	-14.250	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - SIDE FORCE, N(SF)

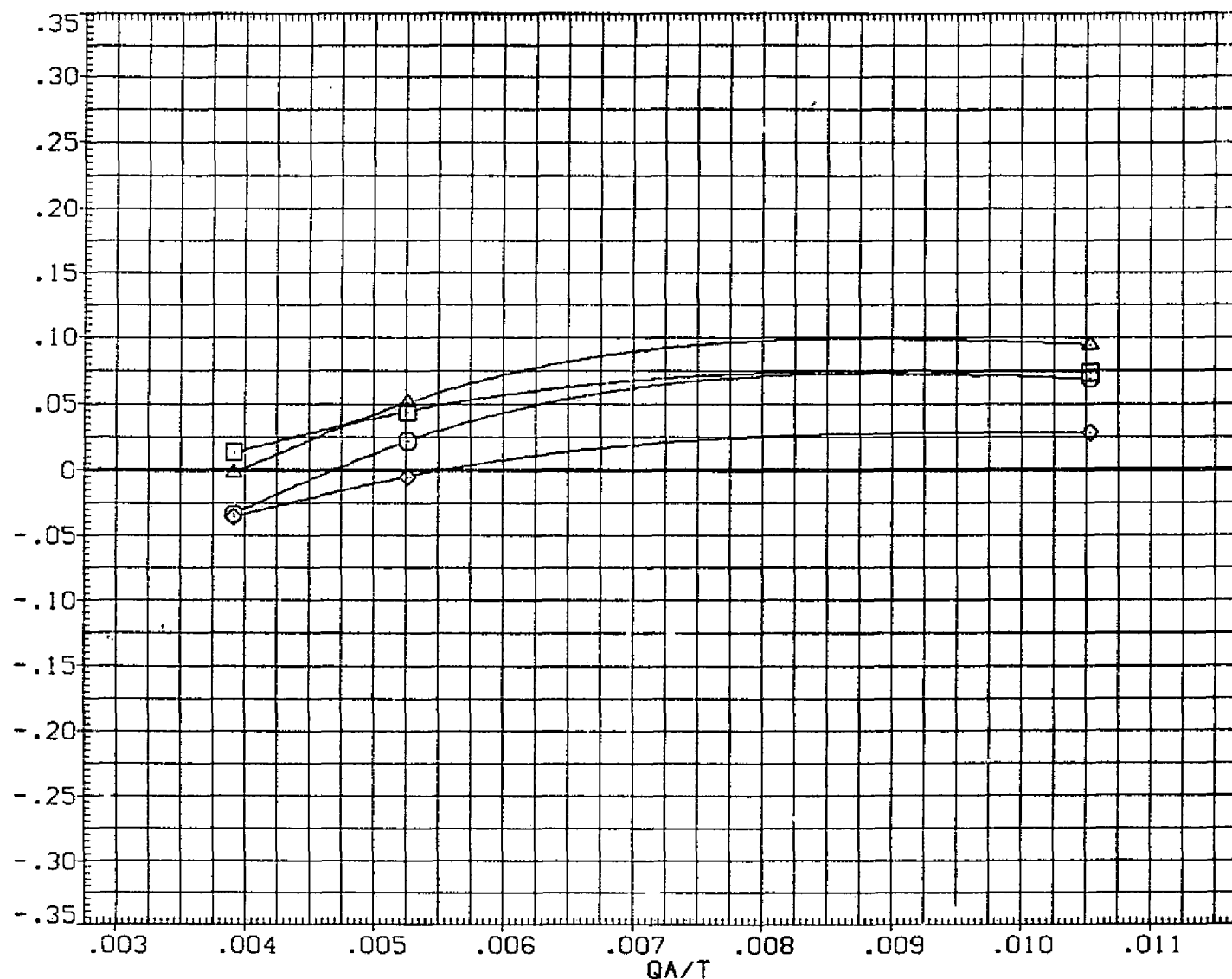


FIGURE 79. EFFECT OF ELEVON/BODY FLAP ON AMPLIFICATION FACTOR, JETS N50N85

(C) ALPHA = 10.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA021)	01N85N50 LARC CFHT 118 (MA-22)
(SJA036)	01N85N50 LARC CFHT 118 (MA-22)
(SJA082)	01N85N50 LARC CFHT 118 (MA-22)
(SJA010)	01N85N50 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	80FLAP	BETA	REFERENCE INFORMATION		
.000	2.000	-14.250	.000	SREF	2690.0000	50. FT.
-30.000	2.000	.000	.000	LREF	474.8000	INCHES
-30.000	2.000	-14.250	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - SIDE FORCE, N(SF)

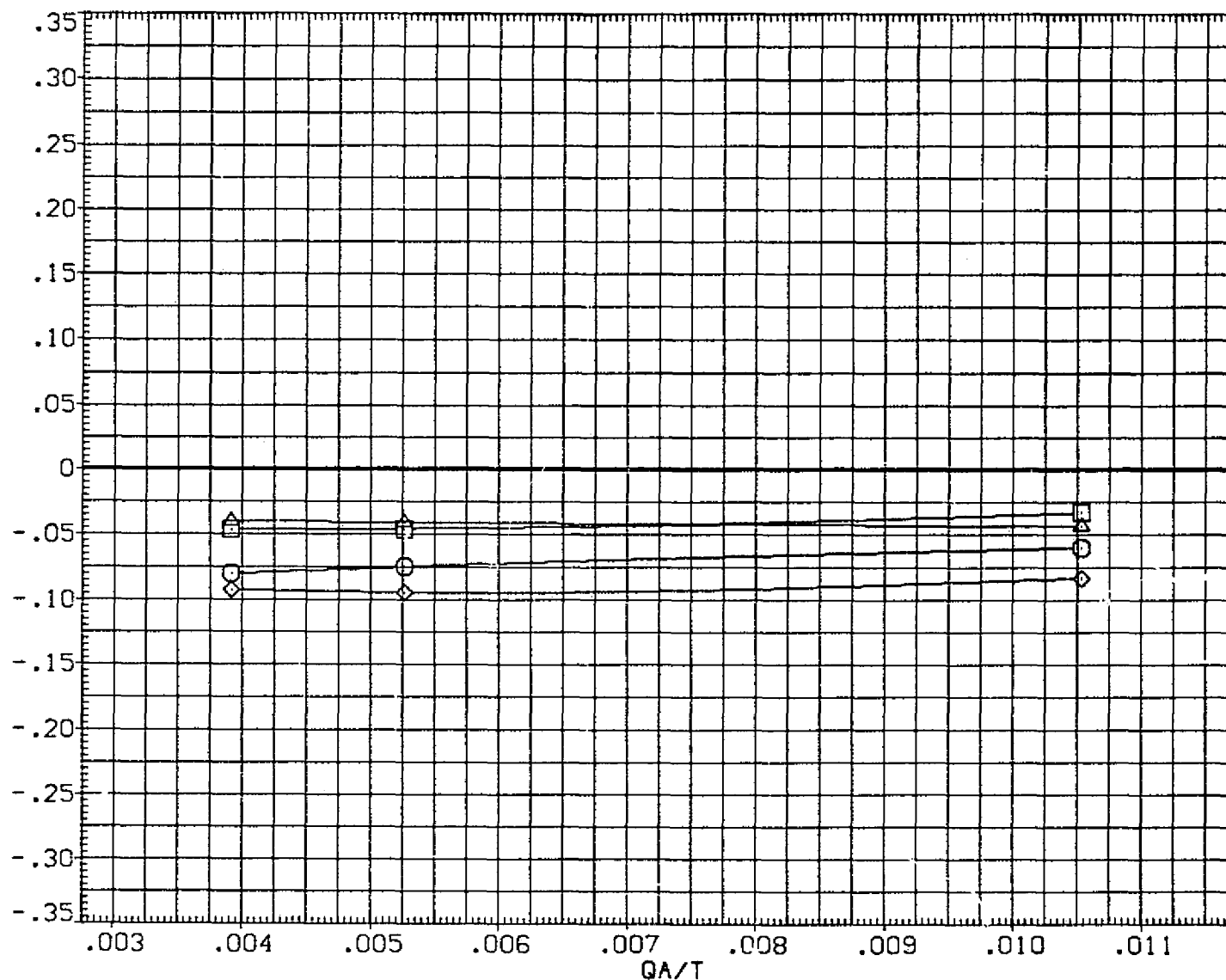


FIGURE 79. EFFECT OF ELEVON/BODY FLAP ON AMPLIFICATION FACTOR, JETS N50N85

(D) ALPHA = 20.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA021)	01N85N50 LARC CFHT 118 (MA-22)
(SJA036)	01N85N50 LARC CFHT 118 (MA-22)
(SJA082)	01N85N50 LARC CFHT 118 (MA-22)
(SJA010)	01N85N50 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BD FLAP	BETA	REFERENCE INFORMATION		
.000	2.000	-14.250	.000	SREF	2690.0000	SQ. FT.
-30.000	2.000	.000	.000	LREF	474.8000	INCHES
-30.000	2.000	-14.250	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. XO
				YMRP	.0000	IN. YO
				ZMRP	375.0000	IN. ZO
				SCALE	.0100	

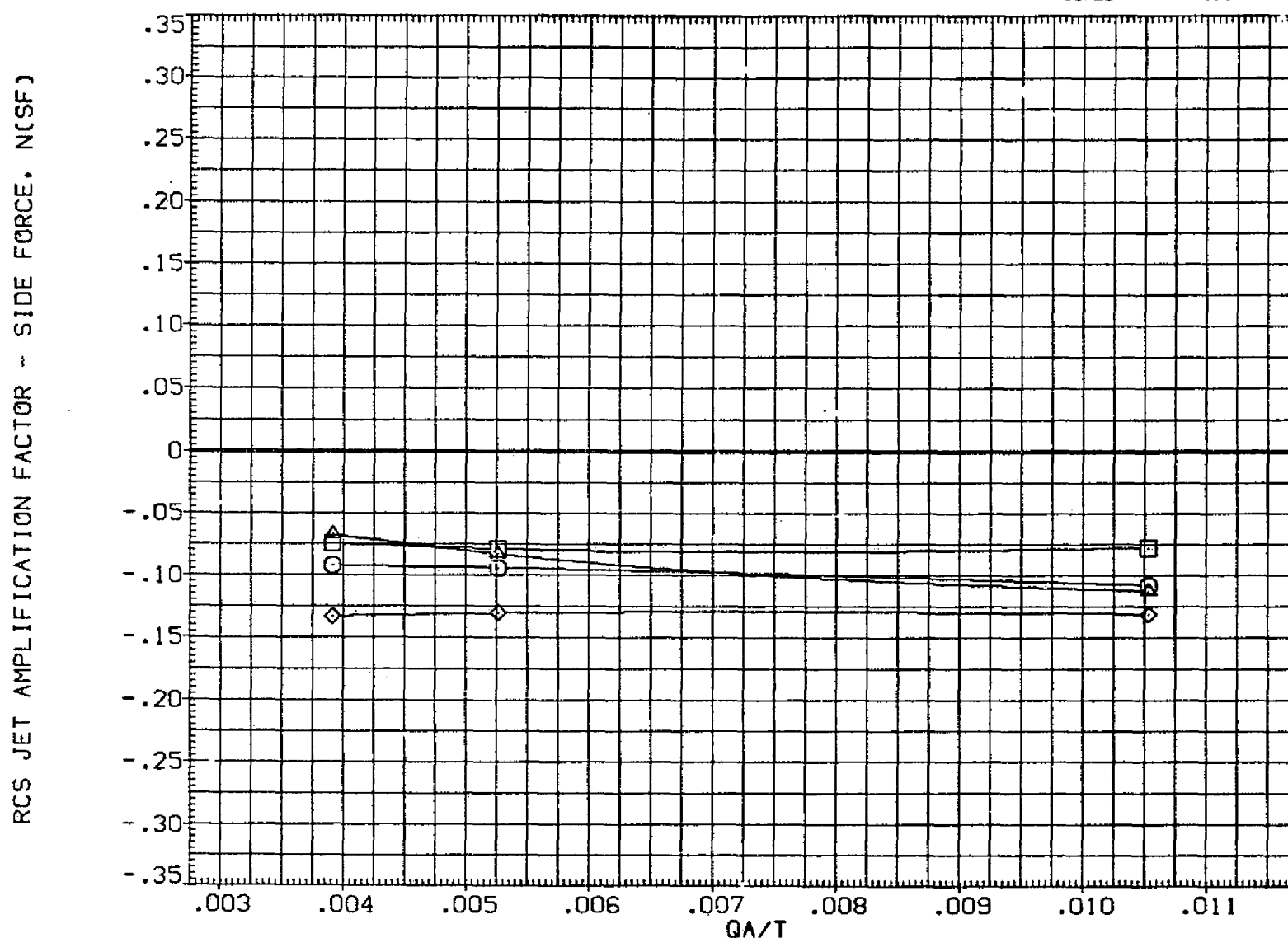


FIGURE 79. EFFECT OF ELEVON/BODY FLAP ON AMPLIFICATION FACTOR, JETS N50N85

(E) ALPHA = 35.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA016)	01N85N50 LARC CFHT 118 (MA-22)
(SJA028)	01N85N50 LARC CFHT 118 (MA-22)
(SJA047)	01N85N50 LARC CFHT 118 (MA-22)
(SJA010)	01N85N50 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BDFLAP	BETA	REFERENCE INFORMATION		
.000	2.000	13.750	.000	SREF	2690.0000	SQ. FT.
10.000	2.000	.000	.000	LREF	474.8000	INCHES
10.000	2.000	13.750	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - NORMAL FORCE, N(NF)

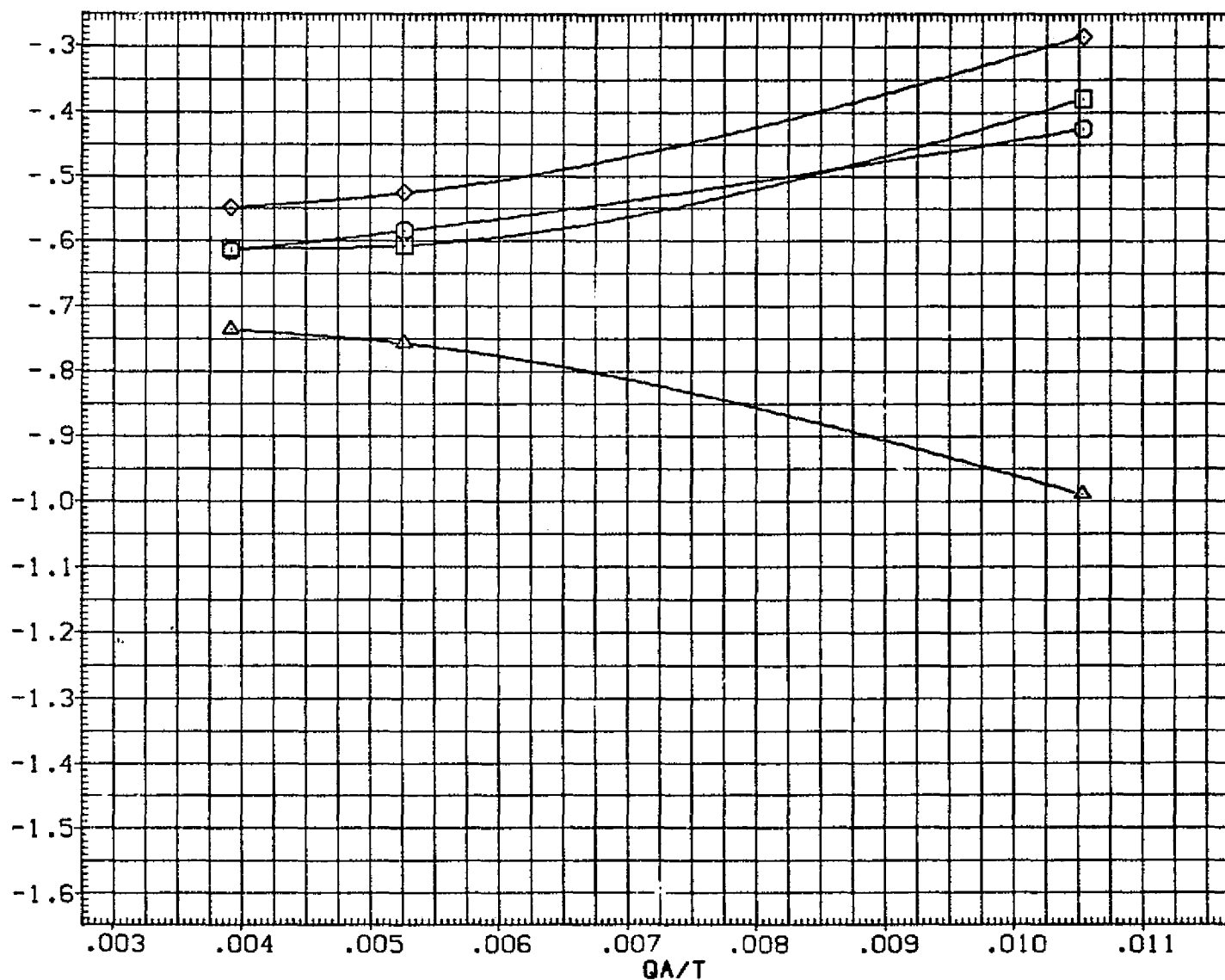


FIGURE 80. EFFECT OF ELEVON/BODY FLAP ON AMPLIFICATION FACTOR, JETS N50N85
(A) ALPHA = -8.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA016)	01N85N50 LARC CFHT 118 (MA-22)
(SJA028)	01N85N50 LARC CFHT 118 (MA-22)
(SJA047)	01N85N50 LARC CFHT 118 (MA-22)
(SJA010)	01N85N50 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BDFLAP	BETA	REFERENCE INFORMATION		
.000	2.000	13.750	.000	SREF	2690.0000	50. FT.
10.000	2.000	.000	.000	LREF	474.8000	INCHES
10.000	2.000	13.750	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - NORMAL FORCE, N(NF)

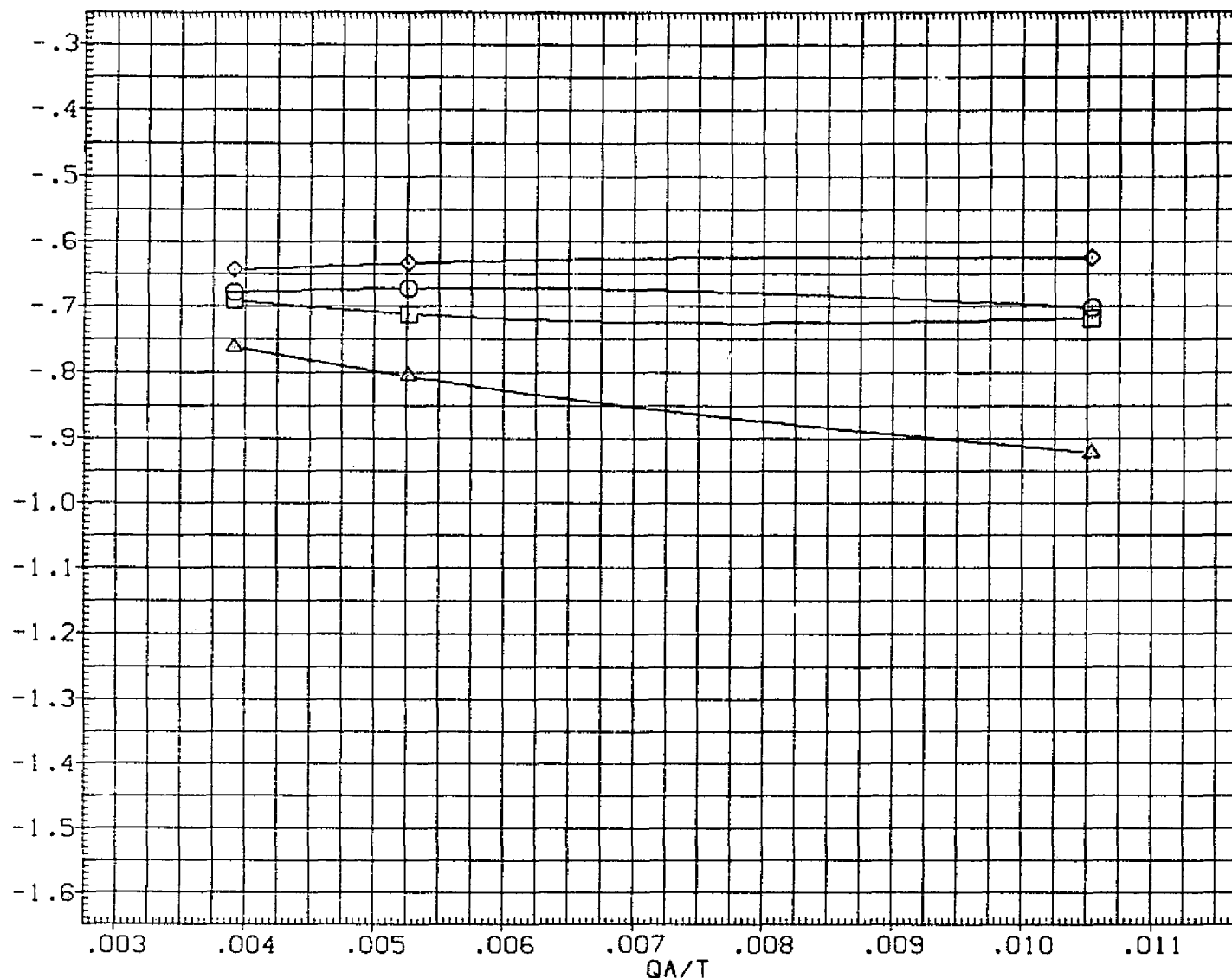


FIGURE 80. EFFECT OF ELEVON/BODY FLAP ON AMPLIFICATION FACTOR, JETS N50N85
(B) ALPHA = .00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA016)	□ 01N85N50 LARC CFHT 118 (MA-22)
(SJA028)	○ 01N85N50 LARC CFHT 118 (MA-22)
(SJA047)	◇ 01N85N50 LARC CFHT 118 (MA-22)
(SJA010)	△ 01N85N50 LARC CFHT 118 (MA-22)

ELEVON	NO.JET	BDFLAP	BETA	REFERENCE INFORMATION		
.000	2.000	13.750	.000	SREF	2690.0000	50.FT.
10.000	2.000	.000	.000	LREF	474.8000	INCHES
10.000	2.000	13.750	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.0100	

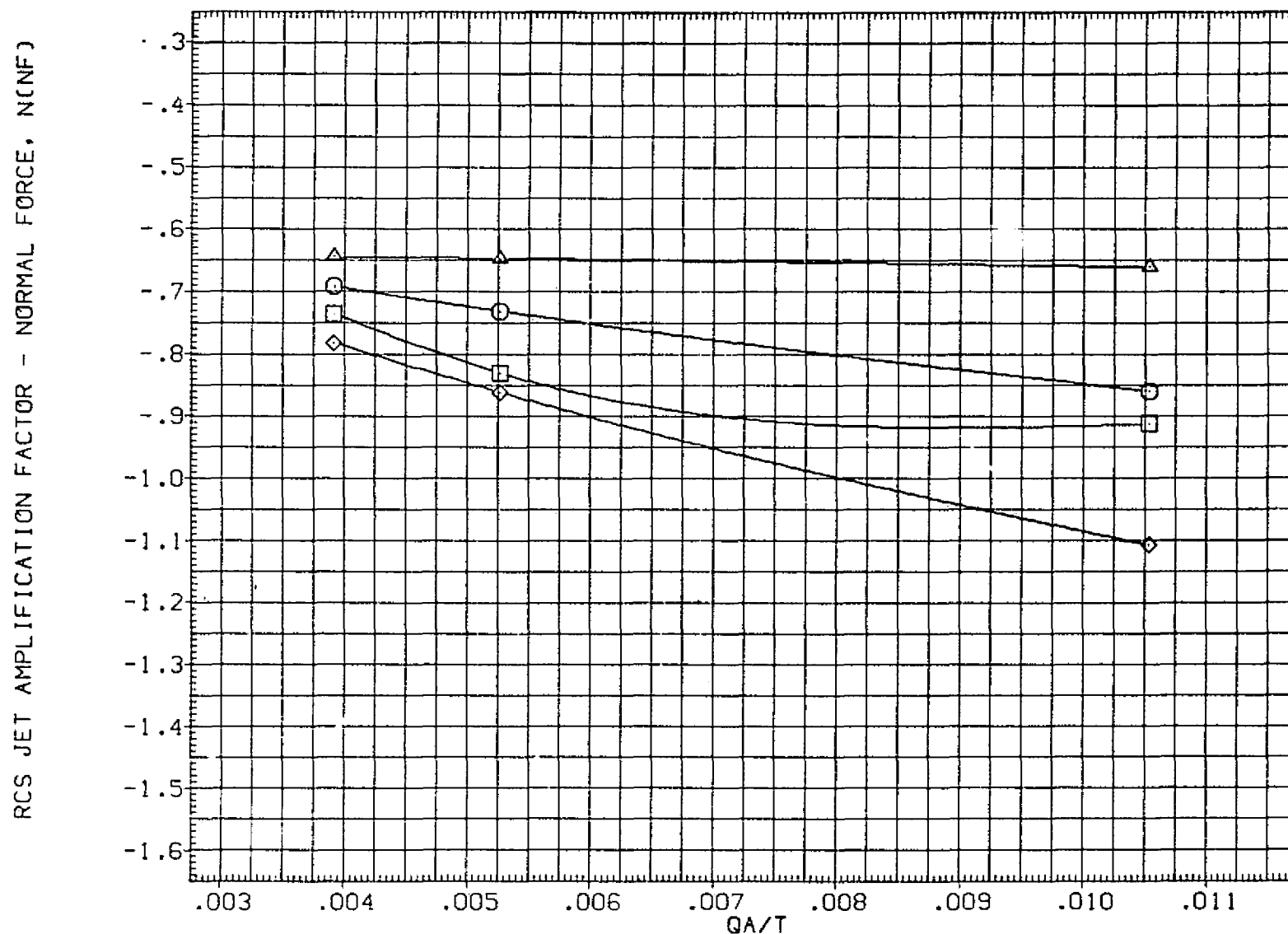


FIGURE 80. EFFECT OF ELEVON/BODY FLAP ON AMPLIFICATION FACTOR, JETS N50N85

(C) ALPHA = 10.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA016)	01N85N50 LARC CFHT 118 (MA-22)
(SJA028)	01N85N50 LARC CFHT 118 (MA-22)
(SJA047)	01N85N50 LARC CFHT 118 (MA-22)
(SJA010)	01N85N50 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BDFLAP	BETA	REFERENCE INFORMATION
.000	2.000	13.750	.000	SREF 2690.0000 SQ. FT.
10.000	2.000	.000	.000	LREF 474.8000 INCHES
10.000	2.000	13.750	.000	BREF 936.6800 INCHES
.000	2.000	.000	.000	XMRP 1076.7000 IN. X0
				YMRP .0000 IN. Y0
				ZMRP 375.0000 IN. Z0
				SCALE .0100

RCS JET AMPLIFICATION FACTOR - NORMAL FORCE, N(NF)

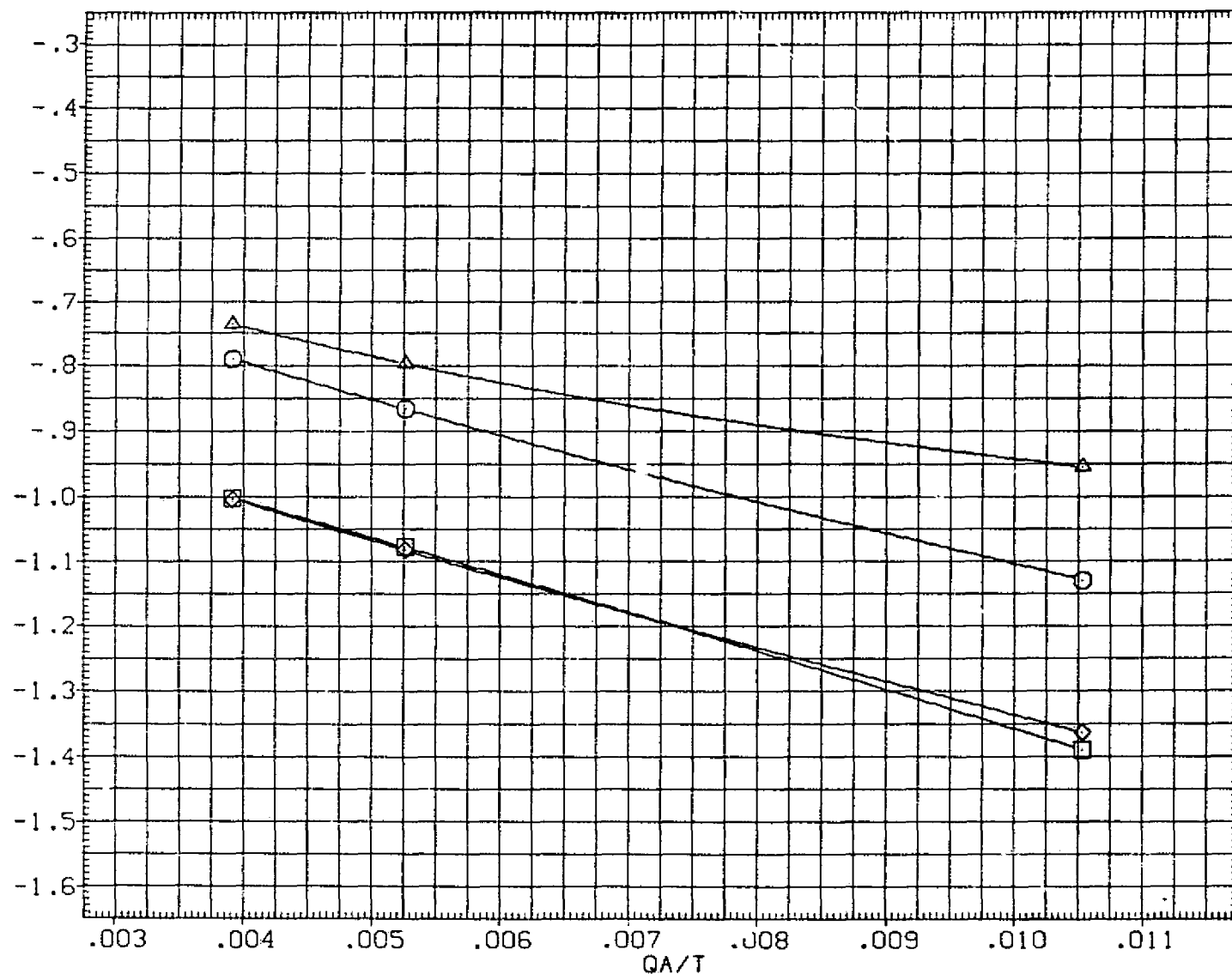


FIGURE 80. EFFECT OF ELEVON/BODY FLAP ON AMPLIFICATION FACTOR, JETS N50N85

(D) ALPHA = 20.00

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION
(SJA016)	○	01N85N50 LARC CFHT 118 (MA-22)
(SJA028)	□	01N85N50 LARC CFHT 118 (MA-22)
(SJA047)	◇	01N85N50 LARC CFHT 118 (MA-22)
(SJA010)	△	01N85N50 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BD FLAP	BETA	REFERENCE INFORMATION		
.000	2.000	13.750	.000	SREF	2690.0000	SQ. FT.
10.000	2.000	.000	.000	LREF	474.8000	INCHES
10.000	2.000	13.750	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. XO
				YMRP	.0000	IN. YO
				ZMRP	375.0000	IN. ZO
				SCALE	.0100	

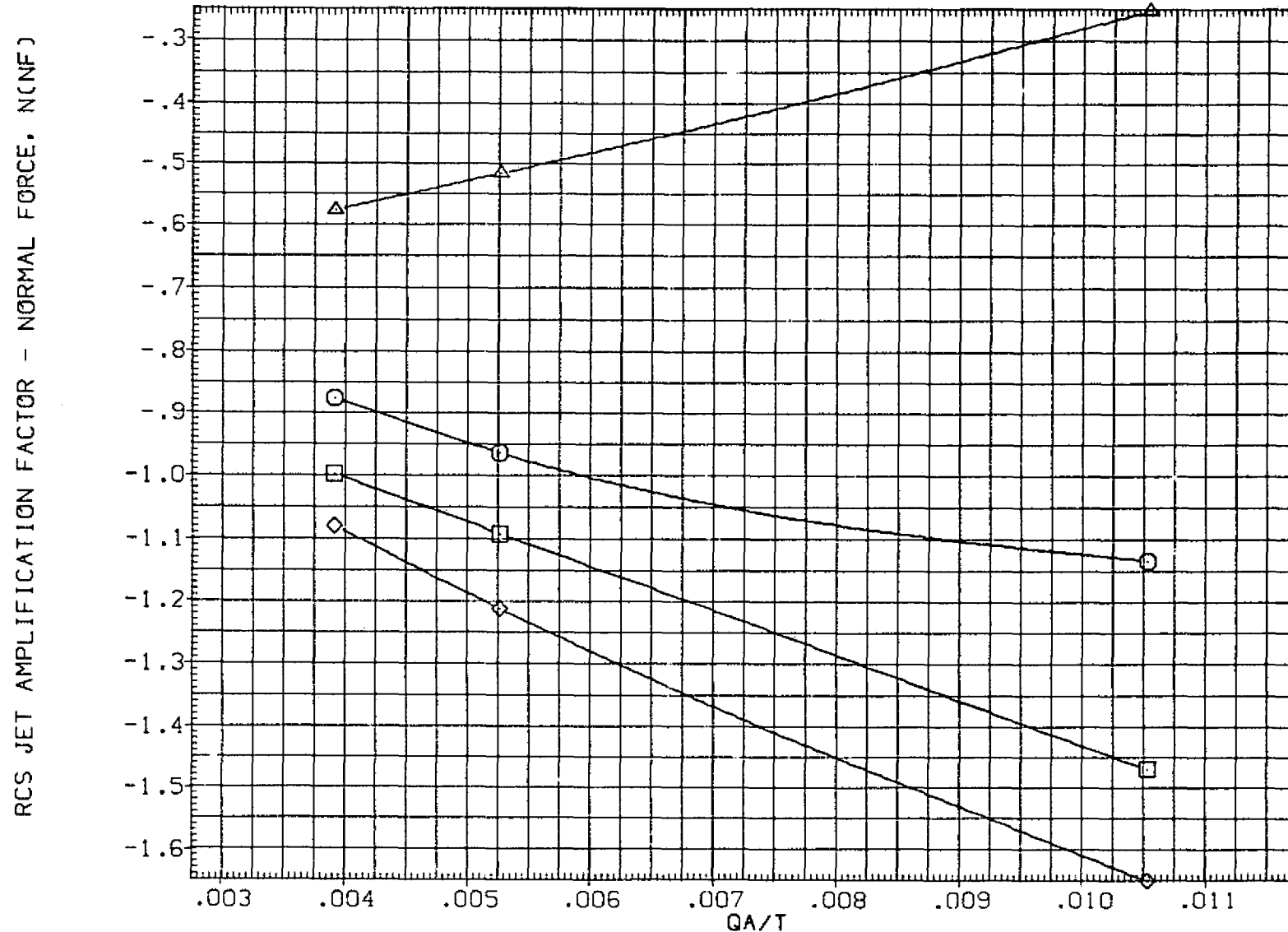


FIGURE 80. EFFECT OF ELEVON/BODY FLAP ON AMPLIFICATION FACTOR, JETS N50N85

(E) ALPHA = 35.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA016)	01N85N50 LARC CFHT 118 (MA-22)
(SJA028)	01N85N50 LARC CFHT 118 (MA-22)
(SJA047)	01N85N50 LARC CFHT 118 (MA-22)
(SJA010)	01N85N50 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BD FLAP	BETA	REFERENCE INFORMATION
.000	2.000	13.750	.000	SREF 2690.0000 SQ. FT.
10.000	2.000	.000	.000	LREF 474.8000 INCHES
10.000	2.000	13.750	.000	BREF 936.8800 INCHES
.000	2.000	.000	.000	XMRP 1076.7000 IN. X0
				YMRP .0000 IN. Y0
				ZMRP 375.0000 IN. Z0
				SCALE .0100

RCS JET AMPLIFICATION FACTOR - PITCH, NCPM)

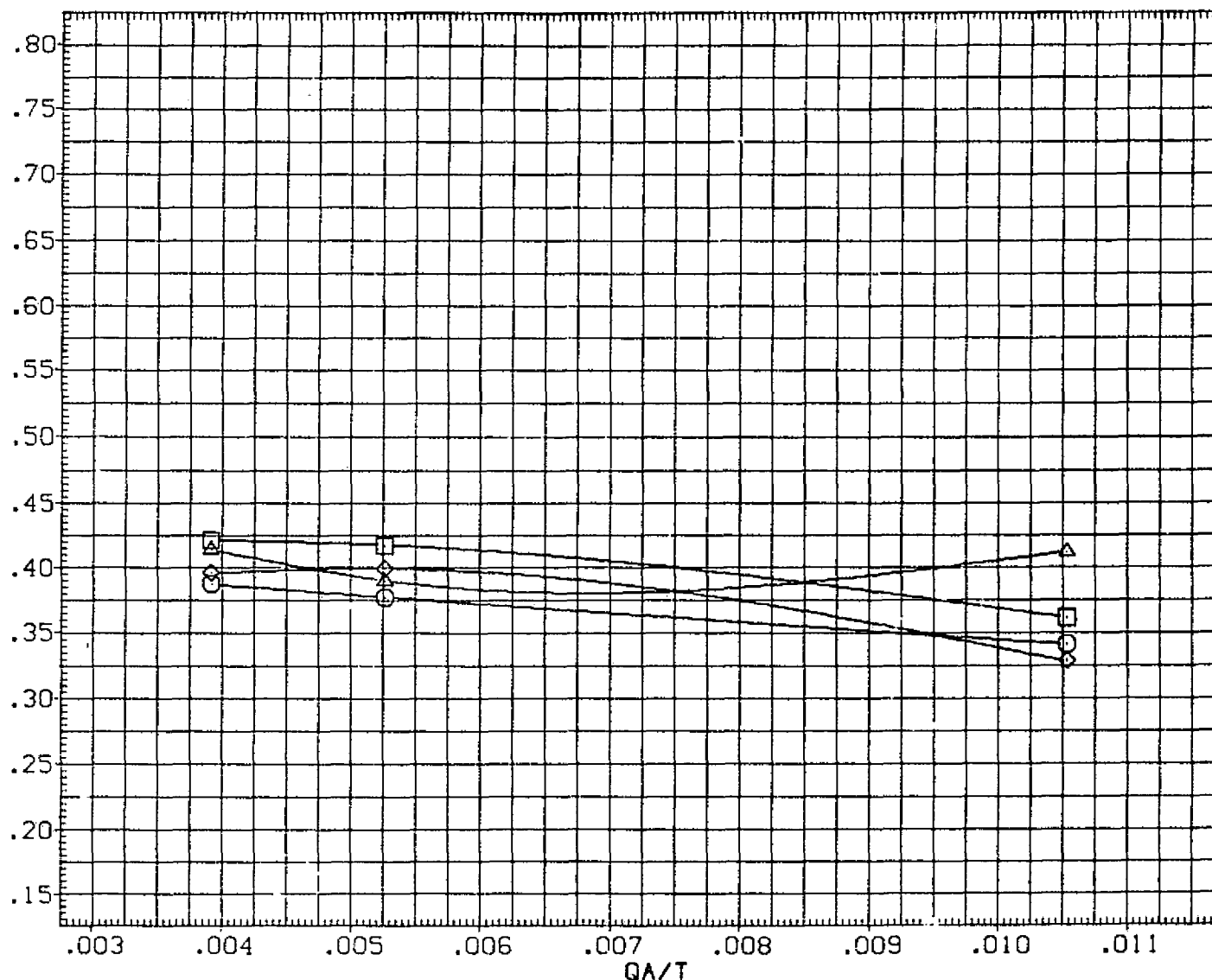


FIGURE 80. EFFECT OF ELEVON/BODY FLAP ON AMPLIFICATION FACTOR, JETS N50N85
(A) ALPHA = -8.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA016)	01N85N50 LARC CFHT 118 (MA-22)
(SJA028)	01N85N50 LARC CFHT 118 (MA-22)
(SJA047)	01N85N50 LARC CFHT 118 (MA-22)
(SJA010)	01N85N50 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BD FLAP	BETA	REFERENCE INFORMATION
.000	2.000	13.750	.000	SREF 2690.0000 SQ. FT.
10.000	2.000	.000	.000	LREF 474.8000 INCHES
10.000	2.000	13.750	.000	BREF 936.6800 INCHES
.000	2.000	.000	.000	XMRP 1076.7000 IN. X0
				YMRP .0000 IN. Y0
				ZMRP 375.0000 IN. Z0
				SCALE .0100

RCS JET AMPLIFICATION FACTOR - PITCH, N(PM)

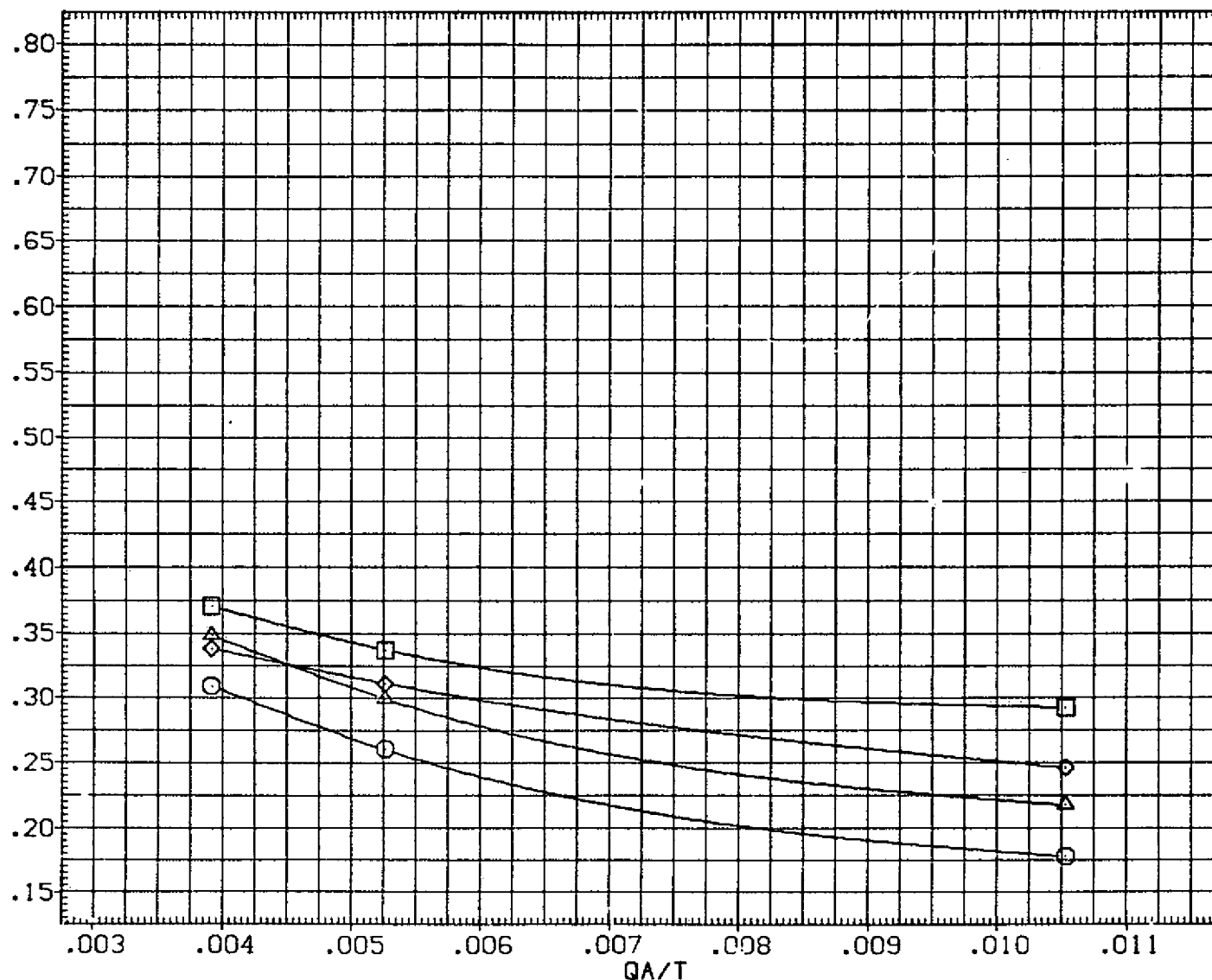


FIGURE 80. EFFECT OF ELEVON/BODY FLAP ON AMPLIFICATION FACTOR, JETS N50N85

(B) ALPHA = .00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA016)	01N85N50 LARC CFHT 118 (MA-22)
(SJA028)	01N85N50 LARC CFHT 118 (MA-22)
(SJA047)	01N85N50 LARC CFHT 118 (MA-22)
(SJA010)	01N85N50 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BOFLAP	BETA	REFERENCE INFORMATION
.000	2.000	13.750	.000	SREF 2690.0000 SQ. FT.
10.000	2.000	.000	.000	LREF 474.8000 INCHES
10.000	2.000	13.750	.000	BREF 936.6800 INCHES
.000	2.000	.000	.000	XMRP 1076.7000 IN. X0
				YMRP .0000 IN. Y0
				ZMRP 375.0000 IN. Z0
				SCALE .0100

RCS JET AMPLIFICATION FACTOR - PITCH, N(PM)

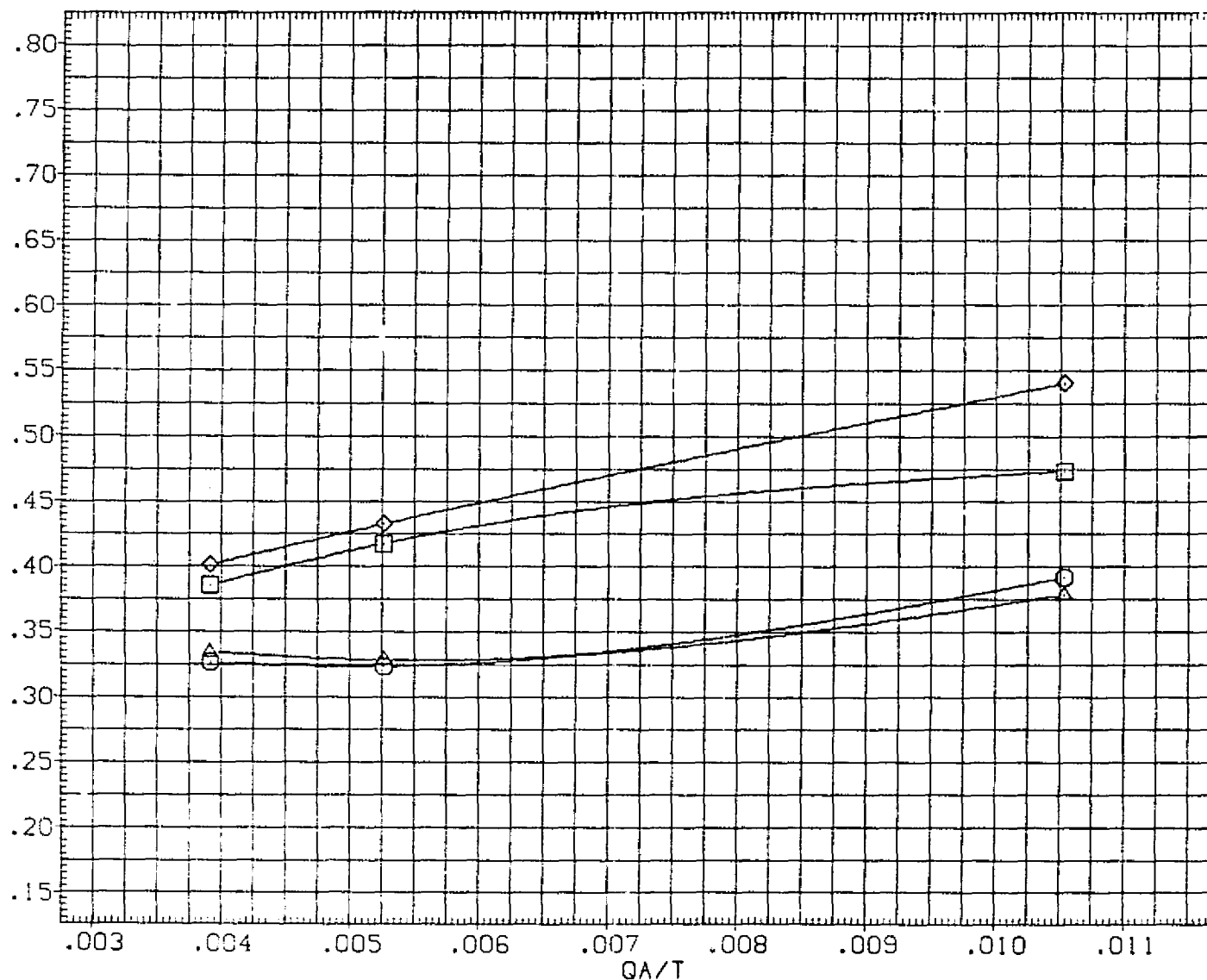


FIGURE 80. EFFECT OF ELEVON/BODY FLAP ON AMPLIFICATION FACTOR, JETS N50N85

(C) ALPHA = 10.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA016)	01N85N50 LARC CFHT 118 (MA-22)
(SJA028)	01N85N50 LARC CFHT 118 (MA-22)
(SJA047)	01N85N50 LARC CFHT 118 (MA-22)
(SJA010)	01N85N50 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BOFLAP	BETA	REFERENCE INFORMATION		
.000	2.000	13.750	.000	SREF	2690.0000	SQ. FT.
10.000	2.000	.000	.000	LREF	474.8000	INCHES
10.000	2.000	13.750	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - PITCH, N(PM)

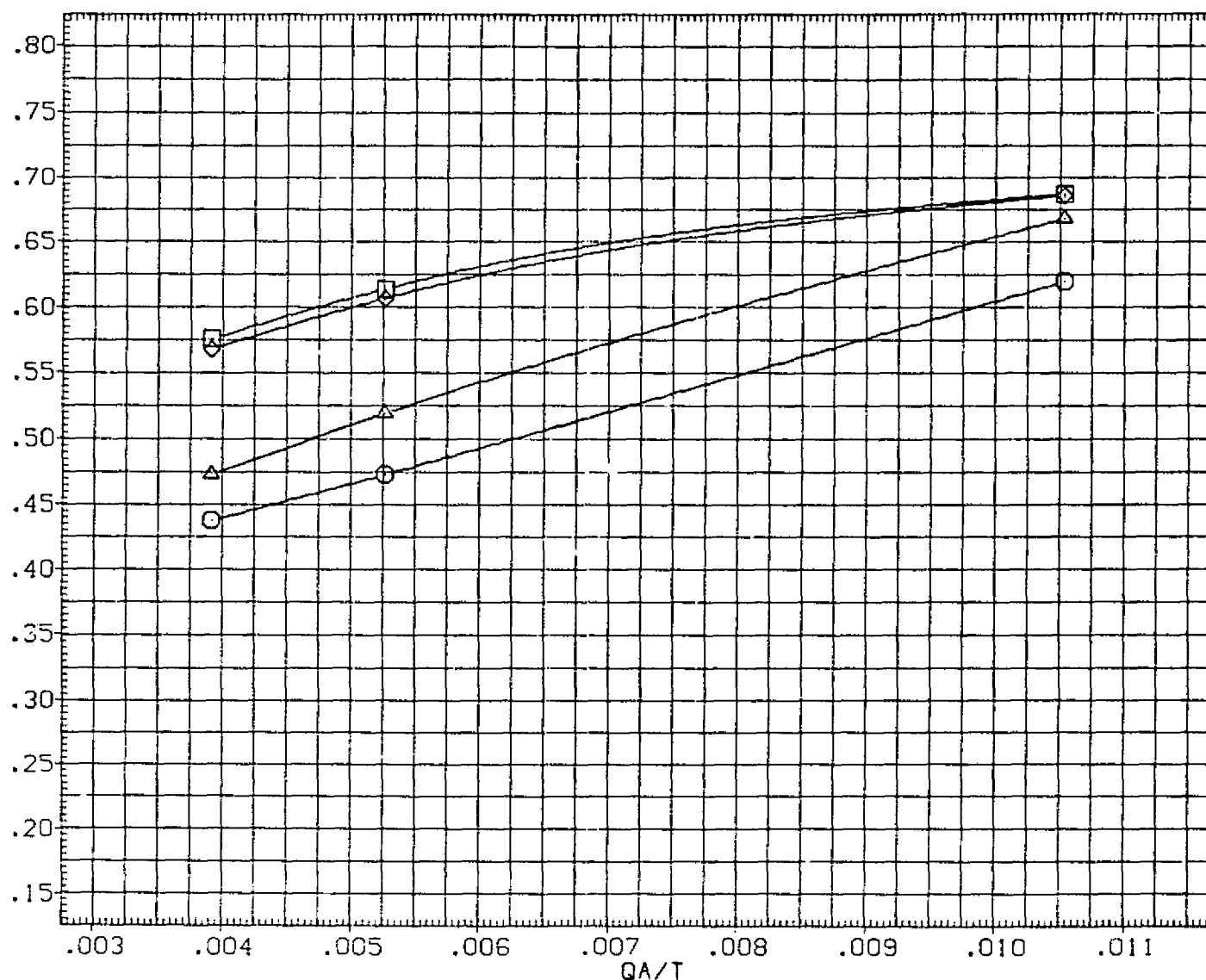


FIGURE 80. EFFECT OF ELEVON/BODY FLAP ON AMPLIFICATION FACTOR, JETS N50N85

(D) ALPHA = 20.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA016)	01N85N50 LARC CFHT 118 (MA-22)
(SJA028)	01N85N50 LARC CFHT 118 (MA-22)
(SJA047)	01N85N50 LARC CFHT 118 (MA-22)
(SJA010)	01N85N50 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BD FLAP	BETA	REFERENCE INFORMATION
.000	2.000	13.750	.000	SREF 2690.0000 SQ. FT.
10.000	2.000	.000	.000	LREF 474.8000 INCHES
10.000	2.000	13.750	.000	BREF 936.6800 INCHES
.000	2.000	.000	.000	XMRP 1076.7000 IN. X0
				YMRP .0000 IN. Y0
				ZMRP 375.0000 IN. Z0
				SCALE .0100

RCS JET AMPLIFICATION FACTOR - PITCH, N(PM)

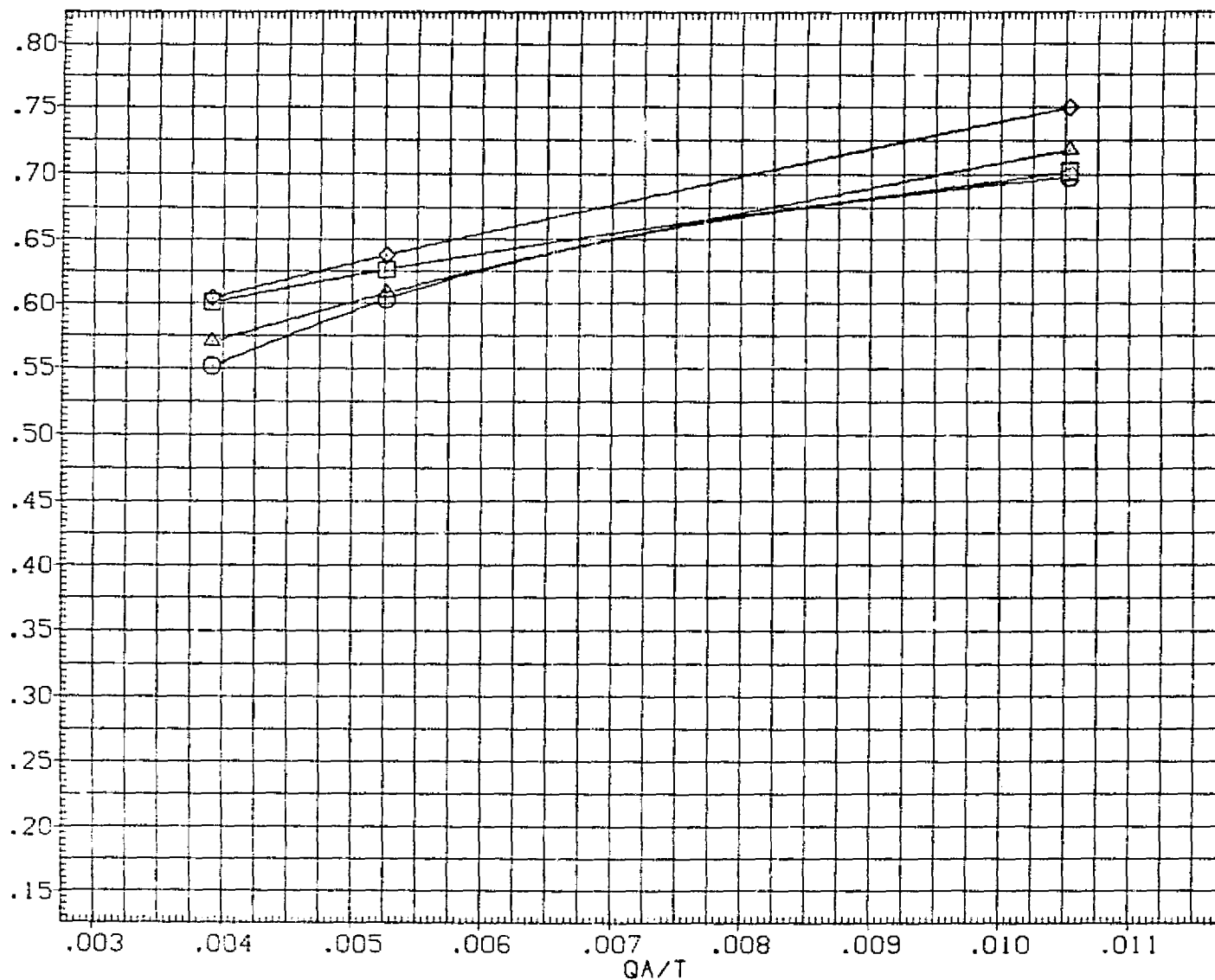


FIGURE 80. EFFECT OF ELEVON/BODY FLAP ON AMPLIFICATION FACTOR, JETS N50N85
(E) ALPHA = 35.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA016)	01N85N50 LARC CFHT 118 (MA-22)
(SJA028)	01N85N50 LARC CFHT 118 (MA-22)
(SJA047)	01N85N50 LARC CFHT 118 (MA-22)
(SJA010)	01N85N50 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BDFLAP	BETA	REFERENCE INFORMATION		
.000	2.000	13.750	.000	SREF	2690.0000	SQ.FT.
10.000	2.000	.000	.000	LREF	474.8000	INCHES
10.000	2.000	13.750	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - AXIAL FORCE, N(AF)

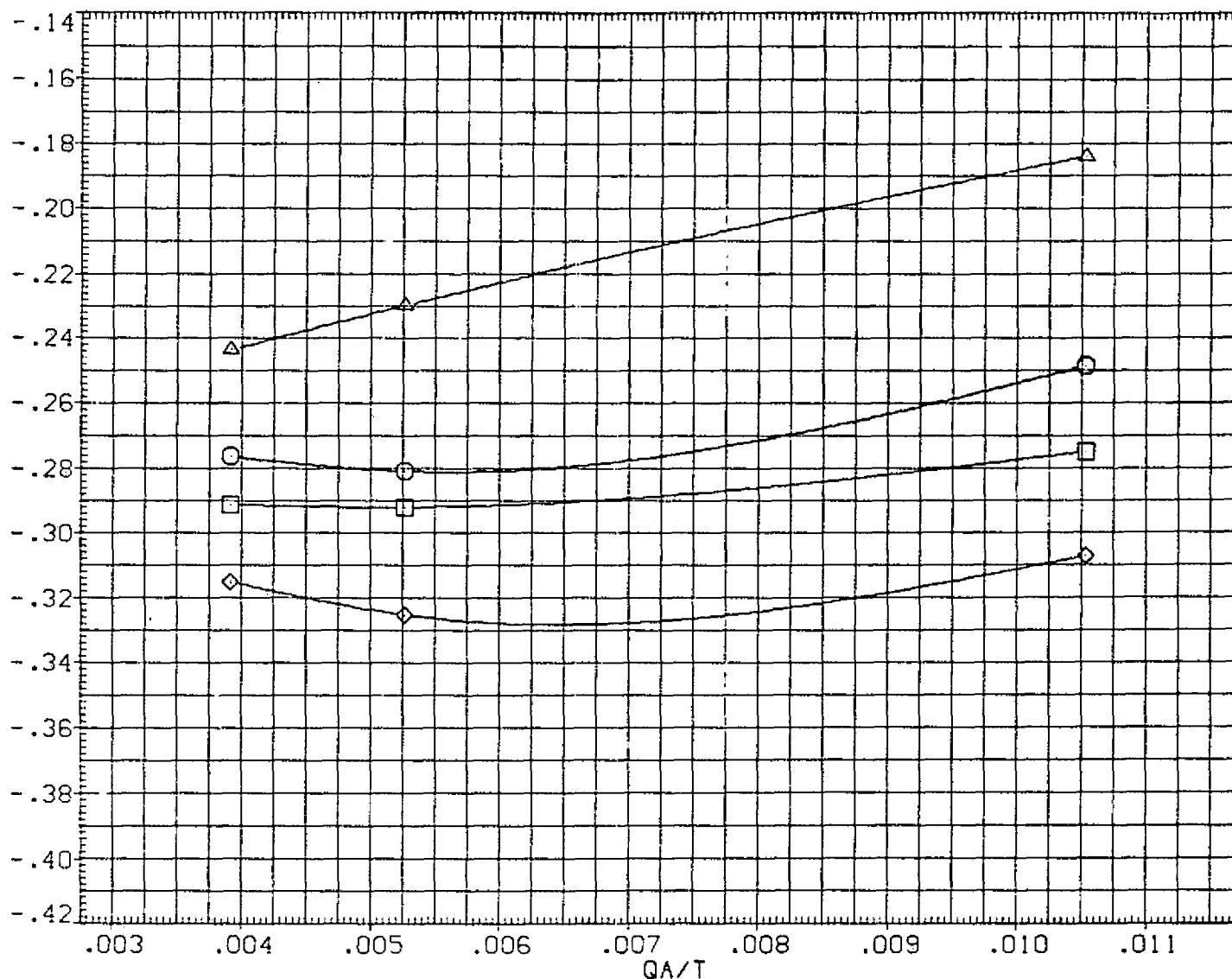


FIGURE 80. EFFECT OF ELEVON/BODY FLAP ON AMPLIFICATION FACTOR, JETS N50N85

(A) ALPHA = -8.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA016)	01N85N50 LARC CFHT 118 (MA-22)
(SJA028)	01N85N50 LARC CFHT 118 (MA-22)
(SJA047)	01N85N50 LARC CFHT 118 (MA-22)
(SJA010)	01N85N50 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BD FLAP	BETA	REFERENCE INFORMATION
.000	2.000	13.750	.000	SREF 2690.0000 SQ. FT.
10.000	2.000	.000	.000	LREF 474.8000 INCHES
10.000	2.000	13.750	.000	BREF 936.6800 INCHES
.000	2.000	.000	.000	XMRP 1076.7000 IN. X0
				YMRP .0000 IN. Y0
				ZMRP 375.0000 IN. Z0
				SCALE .0100

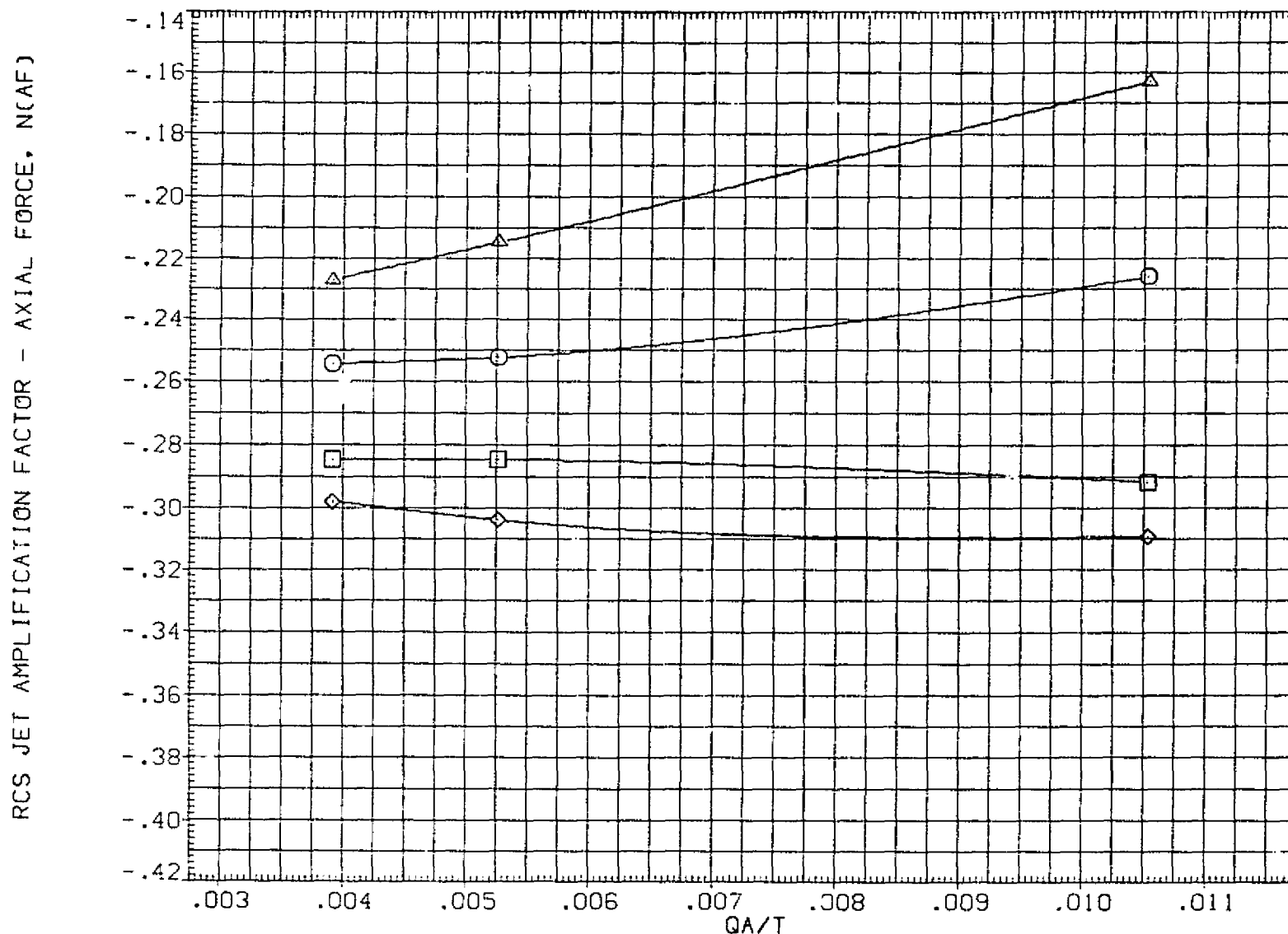


FIGURE 80. EFFECT OF ELEVON/BODY FLAP ON AMPLIFICATION FACTOR, JETS N50N85
(B) ALPHA = .00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA016)	01N85N50 LARC CFHT 118 (MA-22)
(SJA028)	01N85N50 LARC CFHT 118 (MA-22)
(SJA047)	01N85N50 LARC CFHT 118 (MA-22)
(SJA010)	01N85N50 LARC CFHT 118 (MA-22)

ELEVON	NO.JET	BDFLAP	BETA	REFERENCE INFORMATION		
.000	2.000	13.750	.000	SREF	2690.0000	SQ.FT.
10.000	2.000	.000	.000	LREF	474.8000	INCHES
10.000	2.000	13.750	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - AXIAL FORCE, N(AF)

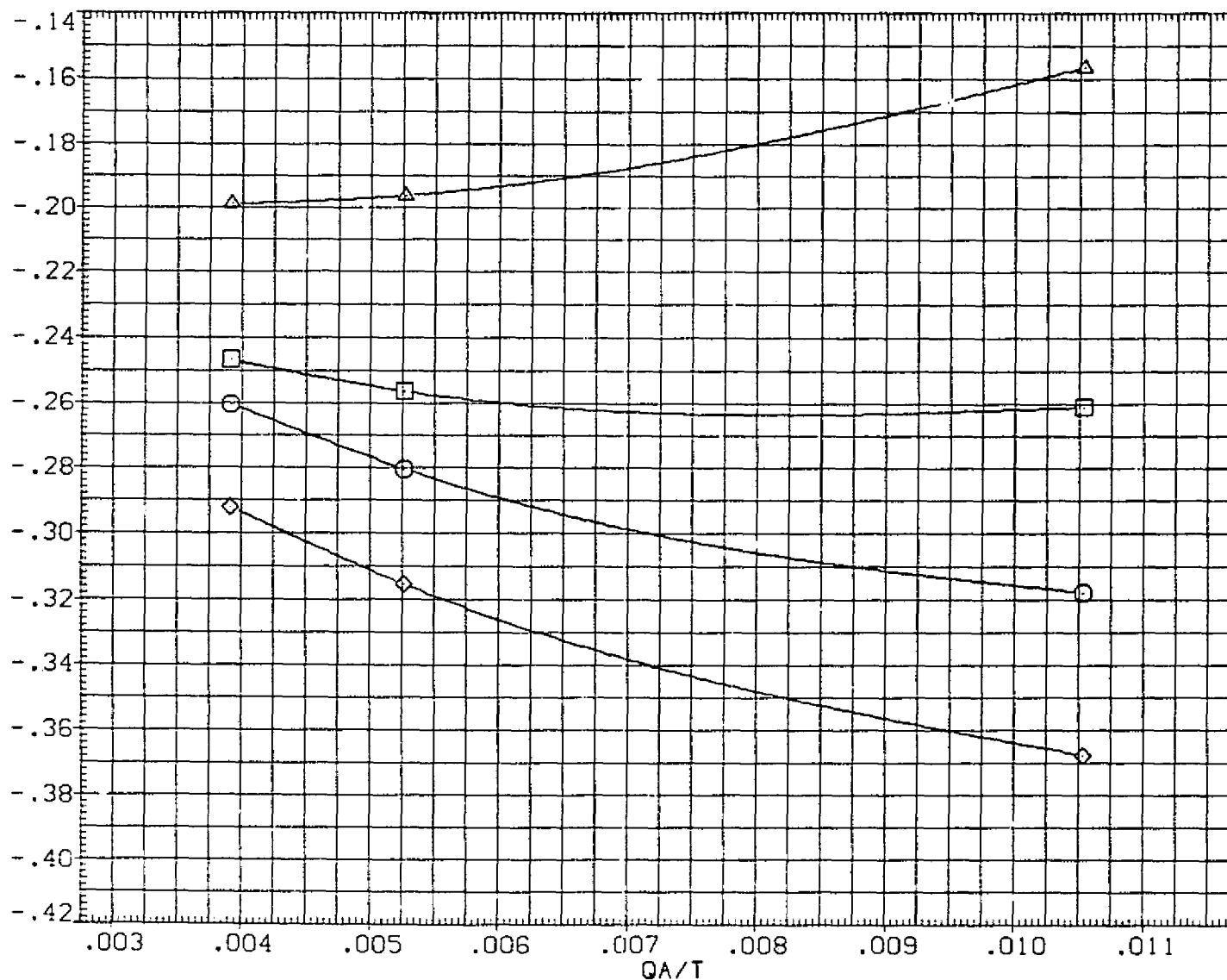


FIGURE 80. EFFECT OF ELEVON/BODY FLAP ON AMPLIFICATION FACTOR, JETS N50N85

(C) ALPHA = 10.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA016)	01N85N50 LARC CFHT 118 (MA-22)
(SJA028)	01N85N50 LARC CFHT 118 (MA-22)
(SJA047)	01N85N50 LARC CFHT 118 (MA-22)
(SJA010)	01N85N50 LARC CFHT 118 (MA-22)

ELEVON	NO.JET	BDFLAP	BETA	REFERENCE INFORMATION
.000	2.000	13.750	.000	SREF 2690.0000 SQ.FT.
10.000	2.000	.000	.000	LREF 474.8000 INCHES
10.000	2.000	13.750	.000	BREF 936.6800 INCHES
.000	2.000	.000	.000	XMRP 1076.7000 IN. X0
				YMRP .0000 IN. Y0
				ZMRP 375.0000 IN. Z0
				SCALE .0100

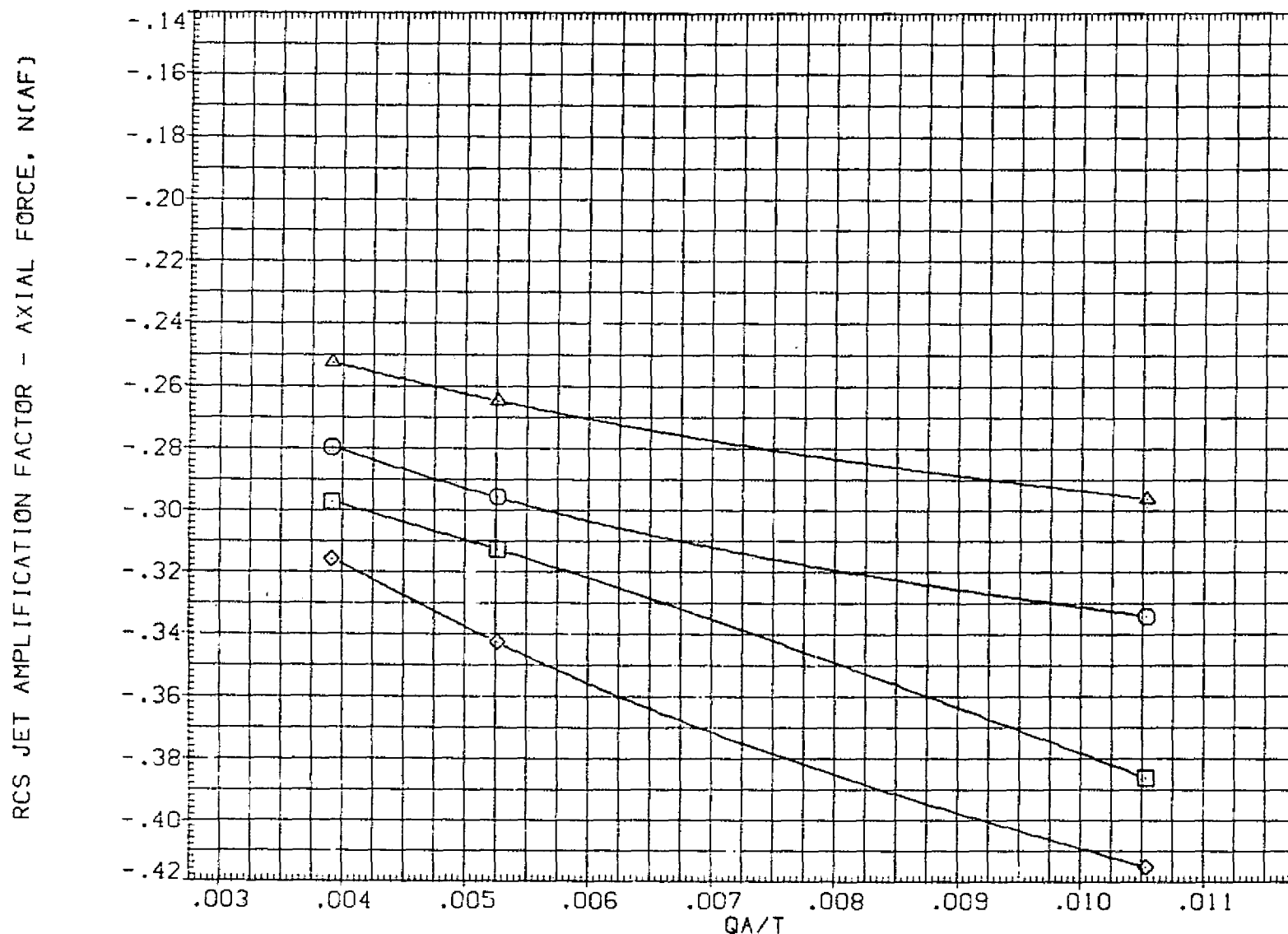


FIGURE 80. EFFECT OF ELEVON/BODY FLAP ON AMPLIFICATION FACTOR, JETS N50N85

(D) ALPHA = 20.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA016)	01N85N50 LARC CFHT 118 (MA-22)
(SJA028)	01N85N50 LARC CFHT 118 (MA-22)
(SJA047)	01N85N50 LARC CFHT 118 (MA-22)
(SJA010)	01N85N50 LARC CFHT 118 (MA-22)

ELEVON	NO.JET	BDFLAP	BETA	REFERENCE INFORMATION		
.000	2.000	13.750	.000	SREF	2690.0000	50.FT.
10.000	2.000	.000	.000	LREF	474.8000	INCHES
10.000	2.000	13.750	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - AXIAL FORCE, N(AF)

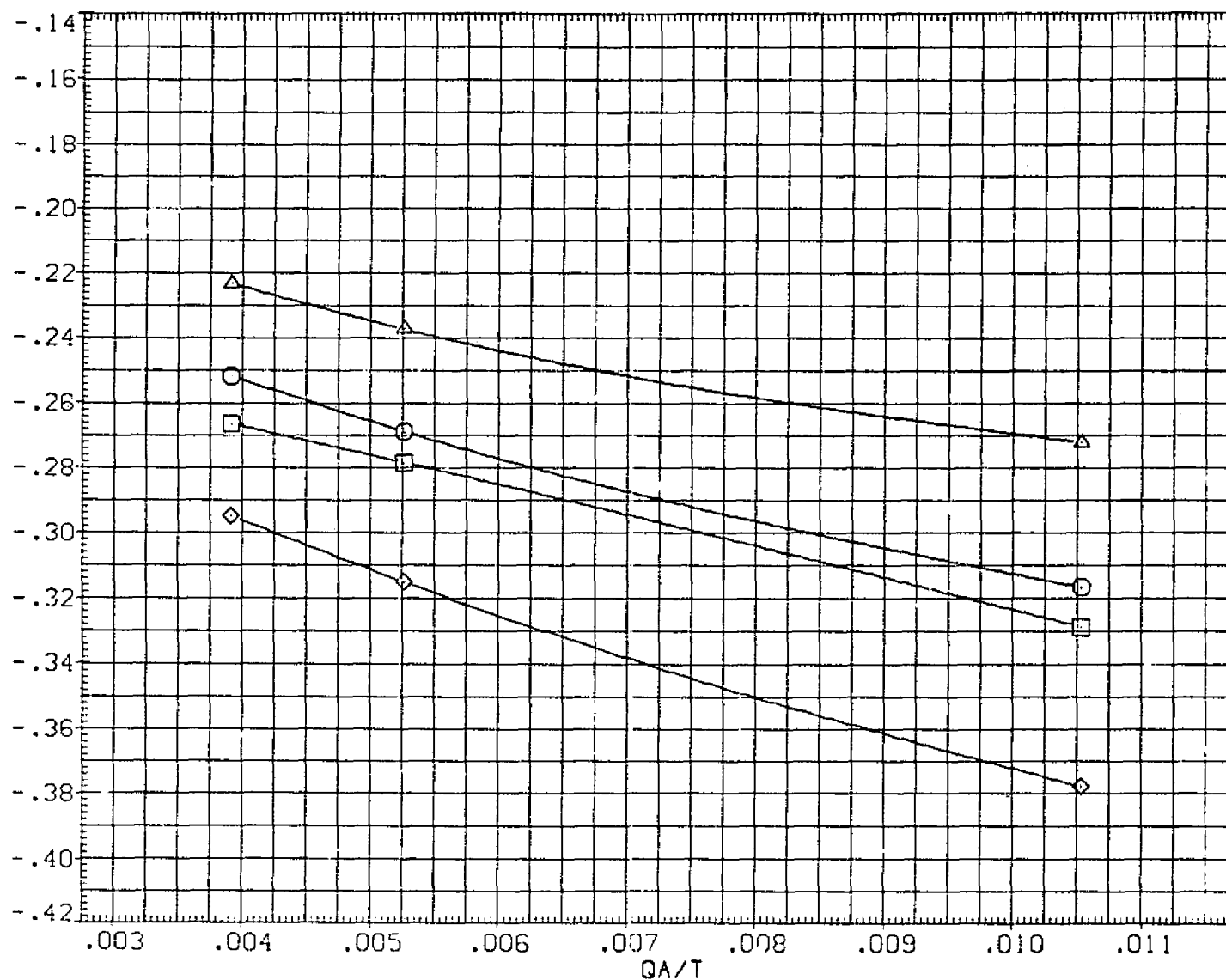


FIGURE 80. EFFECT OF ELEVON/BODY FLAP ON AMPLIFICATION FACTOR, JETS N50N85
(E) ALPHA = 35.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA016)	01N85N50 LARC CFHT 118 (MA-22)
(SJA028)	01N85N50 LARC CFHT 118 (MA-22)
(SJA047)	01N85N50 LARC CFHT 118 (MA-22)
(SJA010)	01N85N50 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BD FLAP	BETA	REFERENCE INFORMATION		
.000	2.000	13.750	.000	SREF	2690.0000	SQ. FT.
10.000	2.000	.000	.000	LREF	474.8000	INCHES
10.000	2.000	13.750	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - ROLL. N(RM)

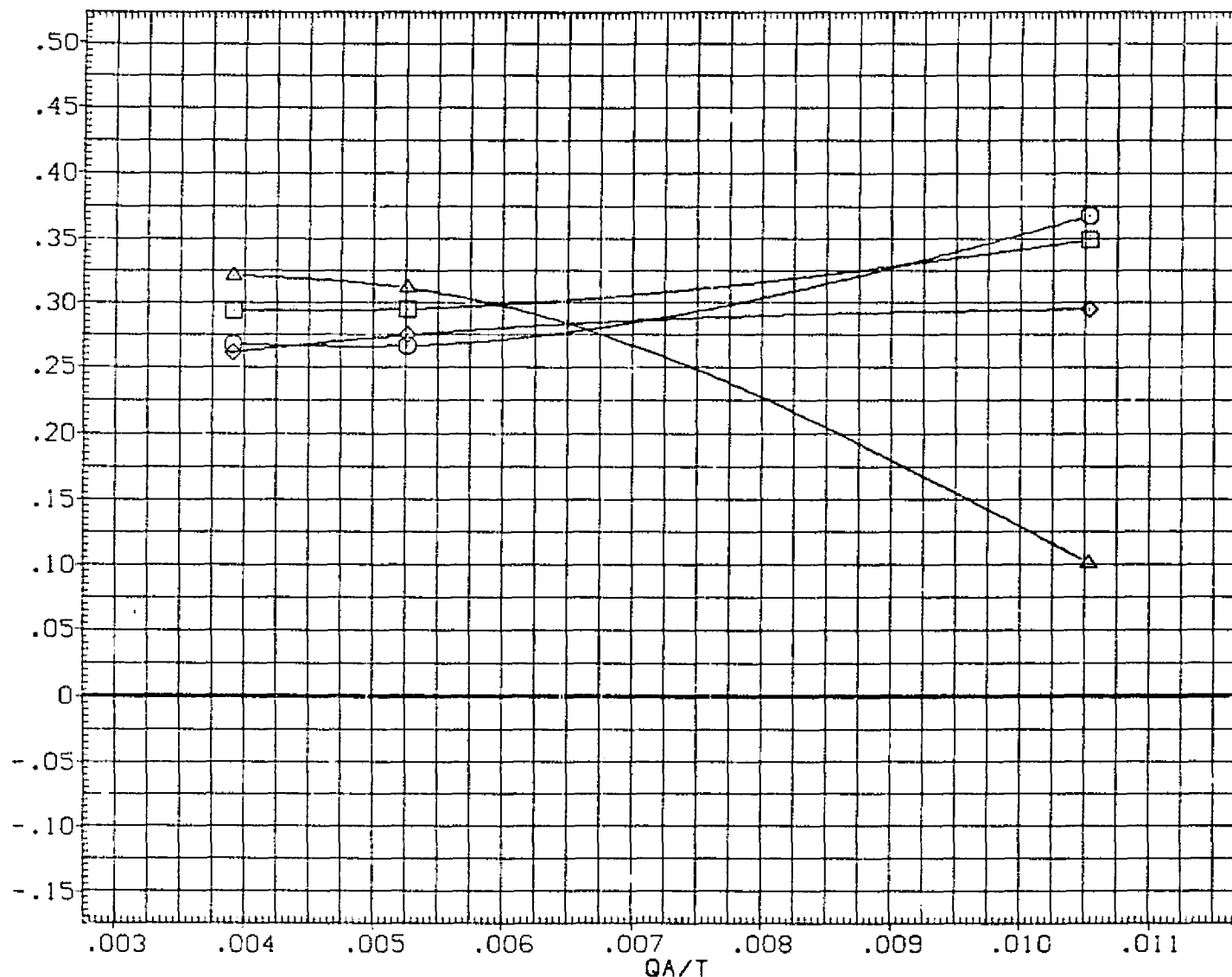


FIGURE 80. EFFECT OF ELEVON/BODY FLAP ON AMPLIFICATION FACTOR, JETS N50N85

(A) ALPHA = -8.00

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DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA016)	01N85N50 LARC CFHT 118 (MA-22)
(SJA028)	01N85N50 LARC CFHT 118 (MA-22)
(SJA047)	01N85N50 LARC CFHT 118 (MA-22)
(SJA010)	01N85N50 LARC CFHT 118 (MA-22)

ELEVON	NO.JET	BDFLAP	BETA	REFERENCE INFORMATION		
.000	2.000	13.750	.000	SREF	2690.0000	SQ.FT.
10.000	2.000	.000	.000	LREF	474.8000	INCHES
10.000	2.000	13.750	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - ROLL, N(RM)

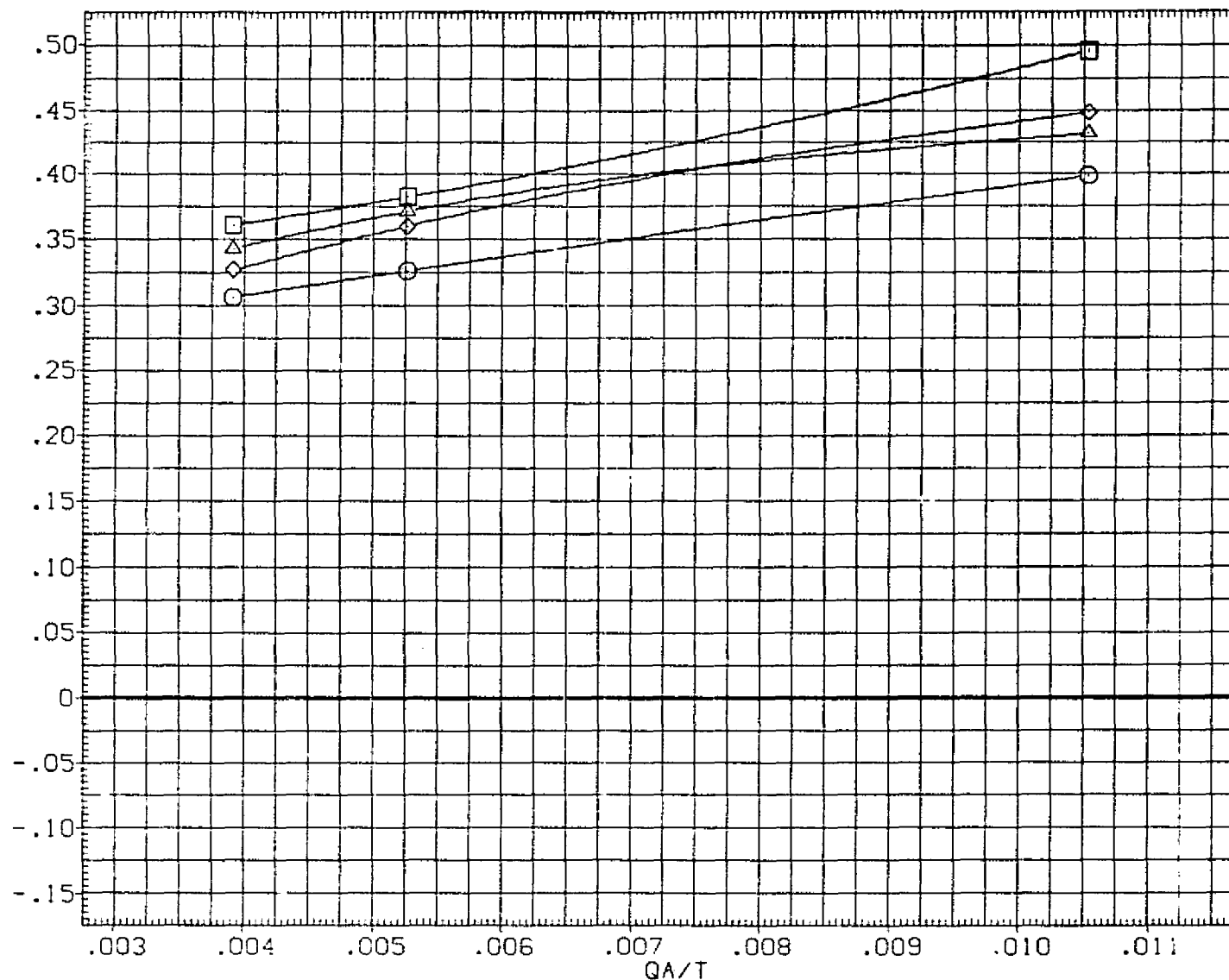


FIGURE 80. EFFECT OF ELEVON/BODY FLAP ON AMPLIFICATION FACTOR, JETS N50N85
(B) ALPHA = .00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA016)	□ 01N85N50 LARC CFHT 118 (MA-22)
(SJA028)	□ 01N85N50 LARC CFHT 118 (MA-22)
(SJA047)	◇ 01N85N50 LARC CFHT 118 (MA-22)
(SJA010)	△ 01N85N50 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BD FLAP	BETA	REFERENCE INFORMATION
.000	2.000	13.750	.000	SREF 2690.0000 SQ. FT.
10.000	2.000	.000	.000	LREF 474.8000 INCHES
10.000	2.000	13.750	.000	BREF 936.6800 INCHES
.000	2.000	.000	.000	XMRP 1076.7000 IN. X0
				YMRP .0000 IN. Y0
				ZMRP 375.0000 IN. Z0
				SCALE .0100

RCS JET AMPLIFICATION FACTOR - ROLL, N(RM)

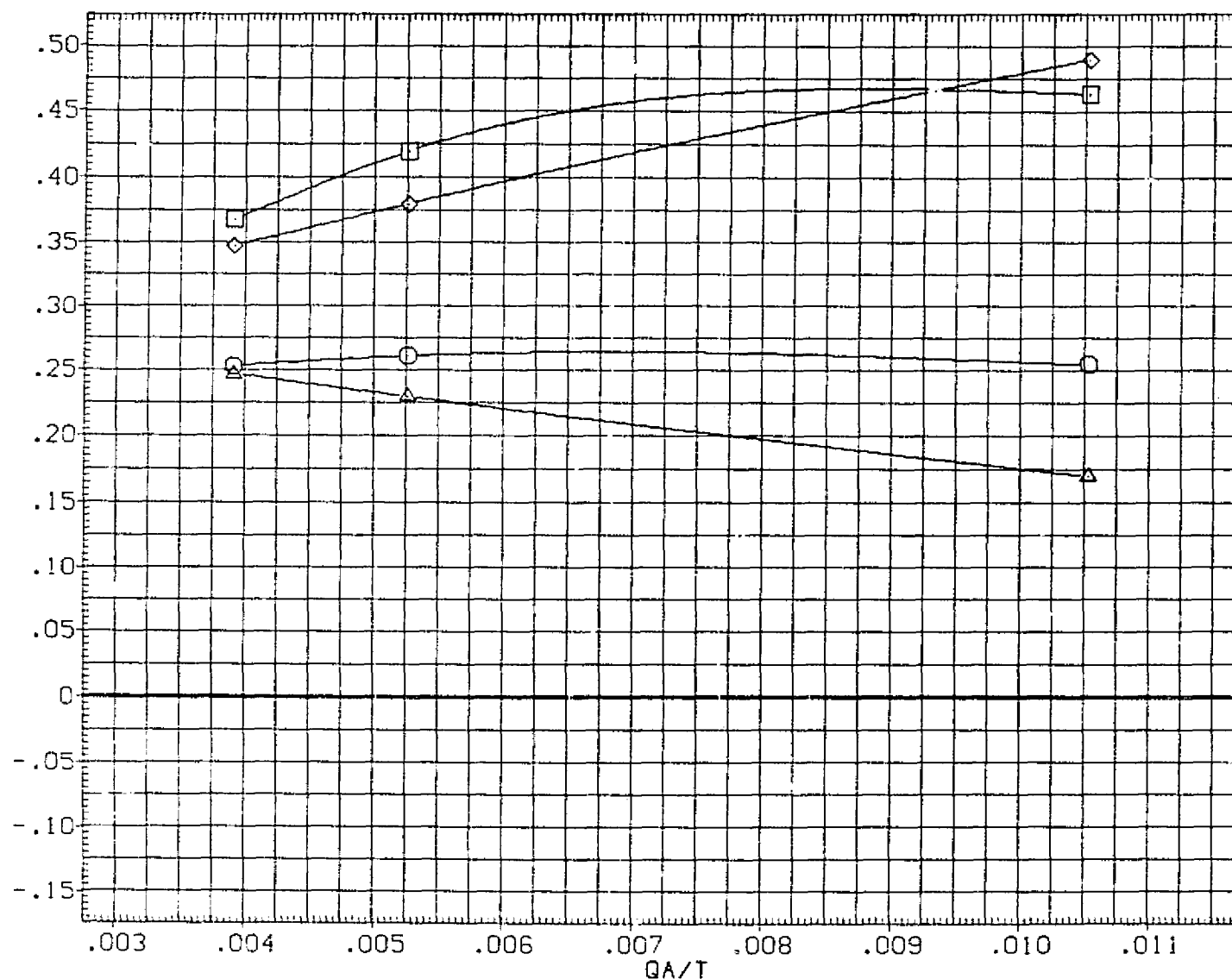


FIGURE 80. EFFECT OF ELEVON/BODY FLAP ON AMPLIFICATION FACTOR, JETS N50N85

(C) ALPHA = 10.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA016)	01N85N50 LARC CFHT 118 (MA-22)
(SJA028)	01N85N50 LARC CFHT 118 (MA-22)
(SJA047)	01N85N50 LARC CFHT 118 (MA-22)
(SJA010)	01N85N50 LARC CFHT 118 (MA-22)

ELEVON	NO.JET	BOFLAP	BETA	REFERENCE INFORMATION
.000	2.000	13.750	.000	SREF 2690.0000 SQ.FT.
10.000	2.000	.000	.000	LREF 474.8000 INCHES
10.000	2.000	13.750	.000	BREF 936.6800 INCHES
.000	2.000	.000	.000	XMRF 1076.7000 IN. X0
				YMRF .0000 IN. Y0
				ZMRF 375.0000 IN. Z0
				SCALE .0100

RCS JET AMPLIFICATION FACTOR - ROLL. N(RM)

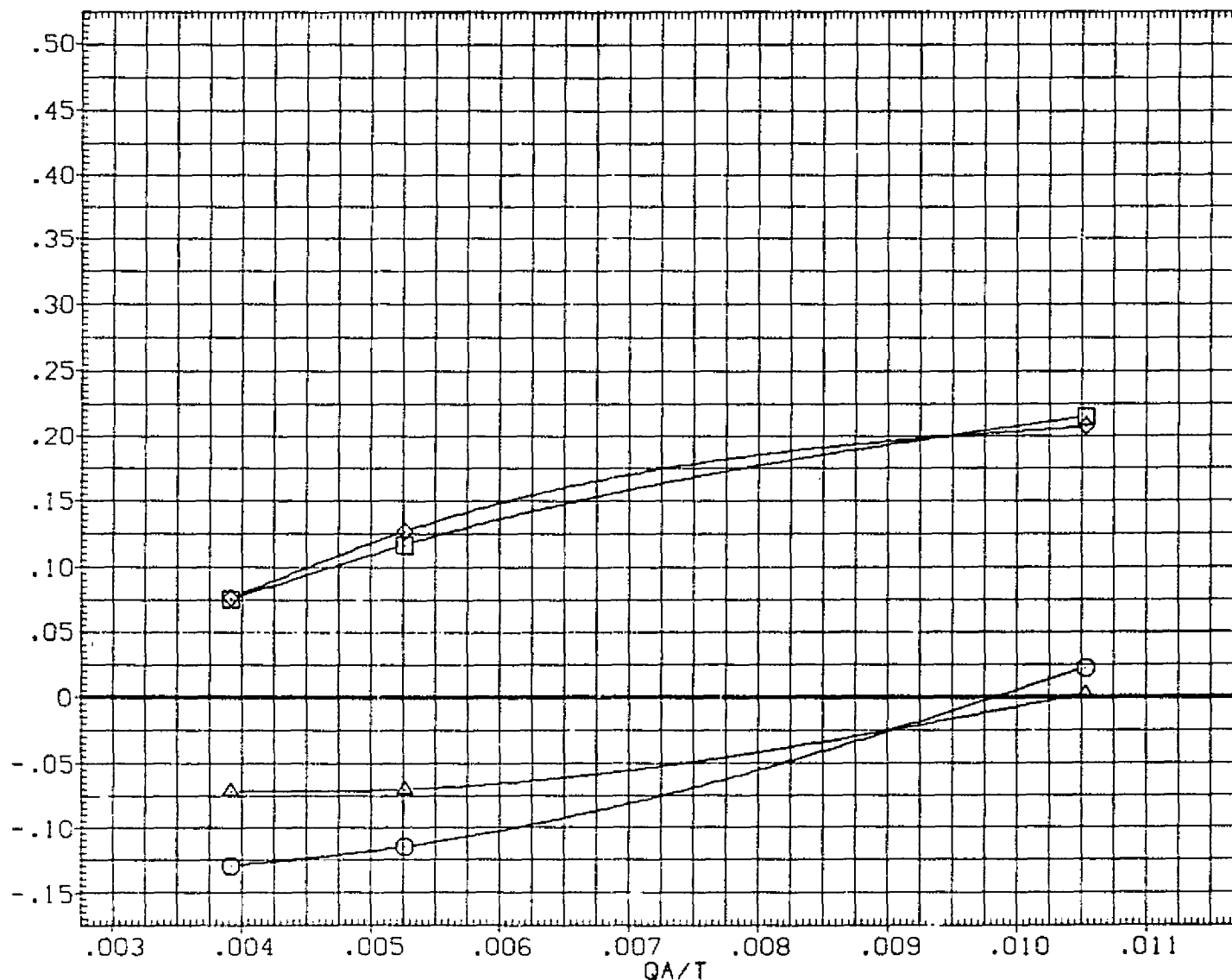


FIGURE 80. EFFECT OF ELEVON/BODY FLAP ON AMPLIFICATION FACTOR, JETS N50N85
(D) ALPHA = 20.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA016)	01N85N50 LARC CFHT 118 (MA-22)
(SJA028)	01N85N50 LARC CFHT 118 (MA-22)
(SJA047)	01N85N50 LARC CFHT 118 (MA-22)
(SJA010)	01N85N50 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BDFLAP	BETA	REFERENCE INFORMATION
.000	2.000	13.750	.000	SREF 2690.0000 SQ. FT.
10.000	2.000	.000	.000	LREF 474.8000 INCHES
10.000	2.000	13.750	.000	BREF 936.6800 INCHES
.000	2.000	.000	.000	XMRP 1076.7000 IN. X0
				YMRP .0000 IN. Y0
				ZMRP 375.0000 IN. Z0
				SCALE .0100

RCS JET AMPLIFICATION FACTOR - ROLL, NCRM)

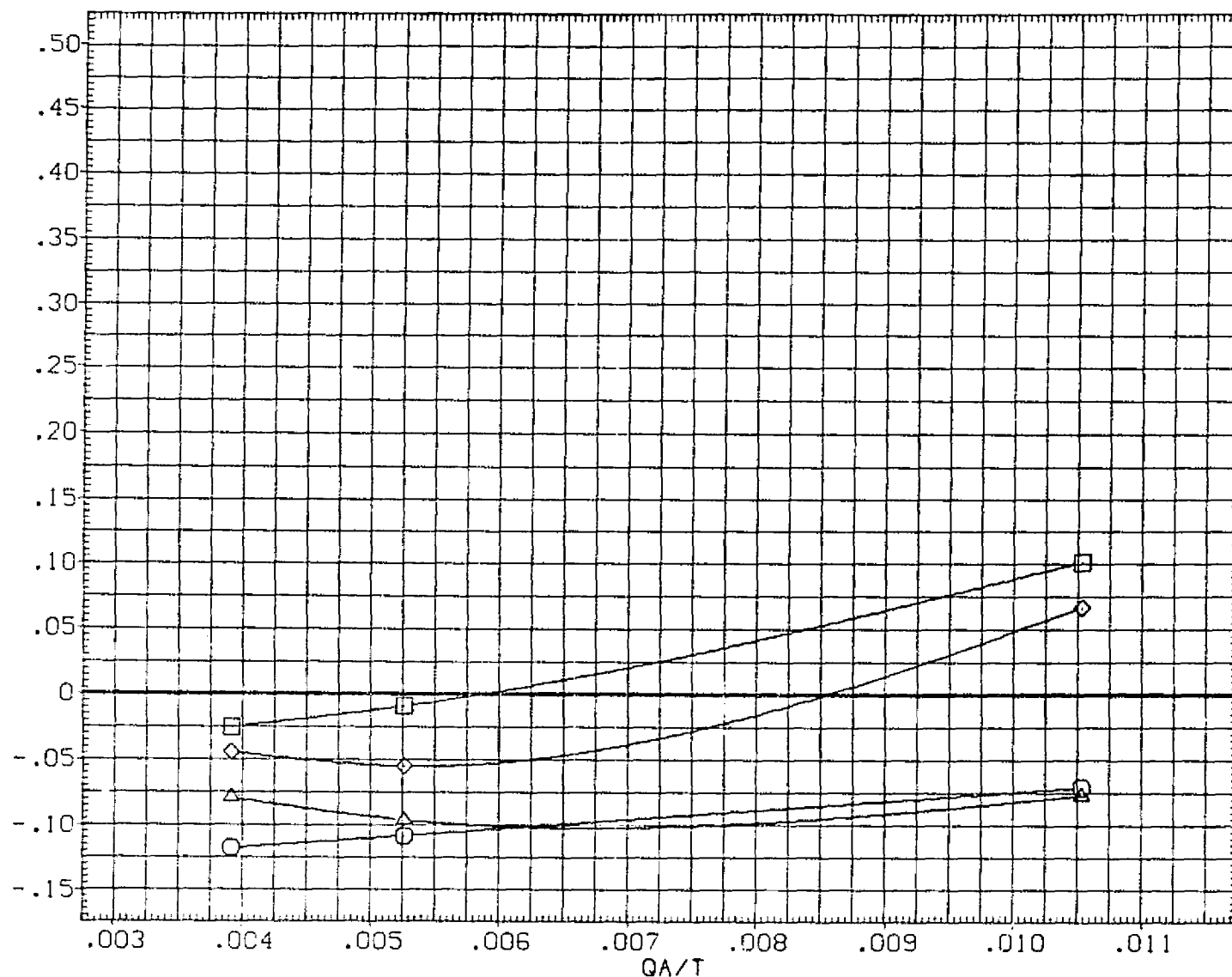


FIGURE 80. EFFECT OF ELEVON/BODY FLAP ON AMPLIFICATION FACTOR, JETS N50N85
(E) ALPHA = 35.00

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION
(SJA016)	○	01N85N50 LARC CFHT 118 (MA-22)
(SJA028)	□	01N85N50 LARC CFHT 118 (MA-22)
(SJA047)	◇	01N85N50 LARC CFHT 118 (MA-22)
(SJA010)	△	01N85N50 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BOFLAP	BETA	REFERENCE INFORMATION		
.000	2.000	13.750	.000	SREF	2690.0000	SQ. FT.
10.000	2.000	.000	.000	LREF	474.8000	INCHES
10.000	2.000	13.750	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - YAW, N(YM)

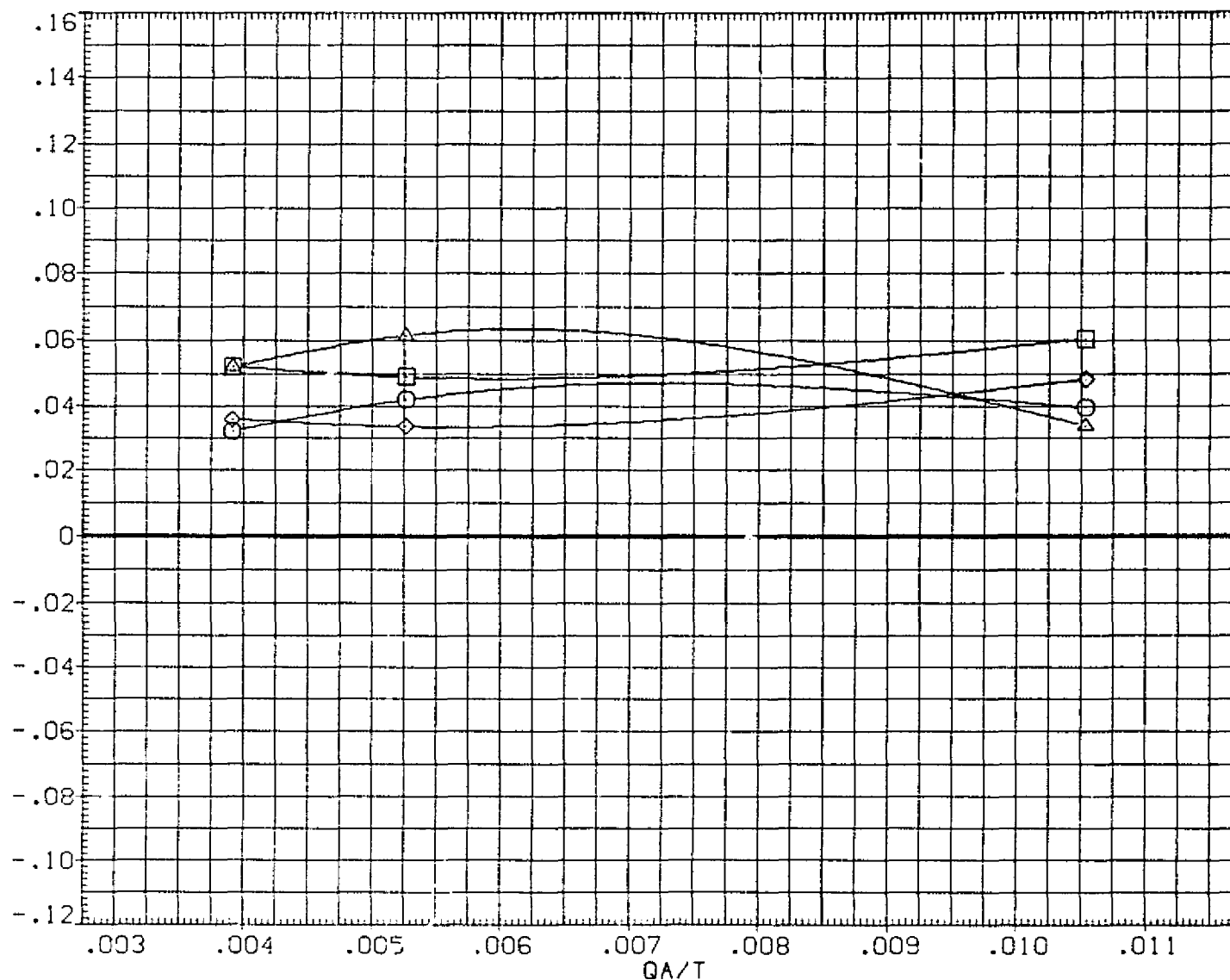


FIGURE 80. EFFECT OF ELEVON/BODY FLAP ON AMPLIFICATION FACTOR, JETS N50N85

(A) ALPHA = -8.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA016)	01N85N50 LARC CFHT 118 (MA-22)
(SJA028)	01N85N50 LARC CFHT 118 (MA-22)
(SJA047)	01N85N50 LARC CFHT 118 (MA-22)
(SJA010)	01N85N50 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BOFLAP	BETA	REFERENCE INFORMATION
.000	2.000	13.750	.000	SREF 2690.0000 SQ. FT.
10.000	2.000	.000	.000	LREF 474.8000 INCHES
10.000	2.000	13.750	.000	BREF 936.6800 INCHES
.000	2.000	.000	.000	XMRP 1076.7000 IN. X0
				YMRP .0000 IN. Y0
				ZMRP 375.0000 IN. Z0
				SCALE .0100

RCS JET AMPLIFICATION FACTOR - YAW, N(YM)

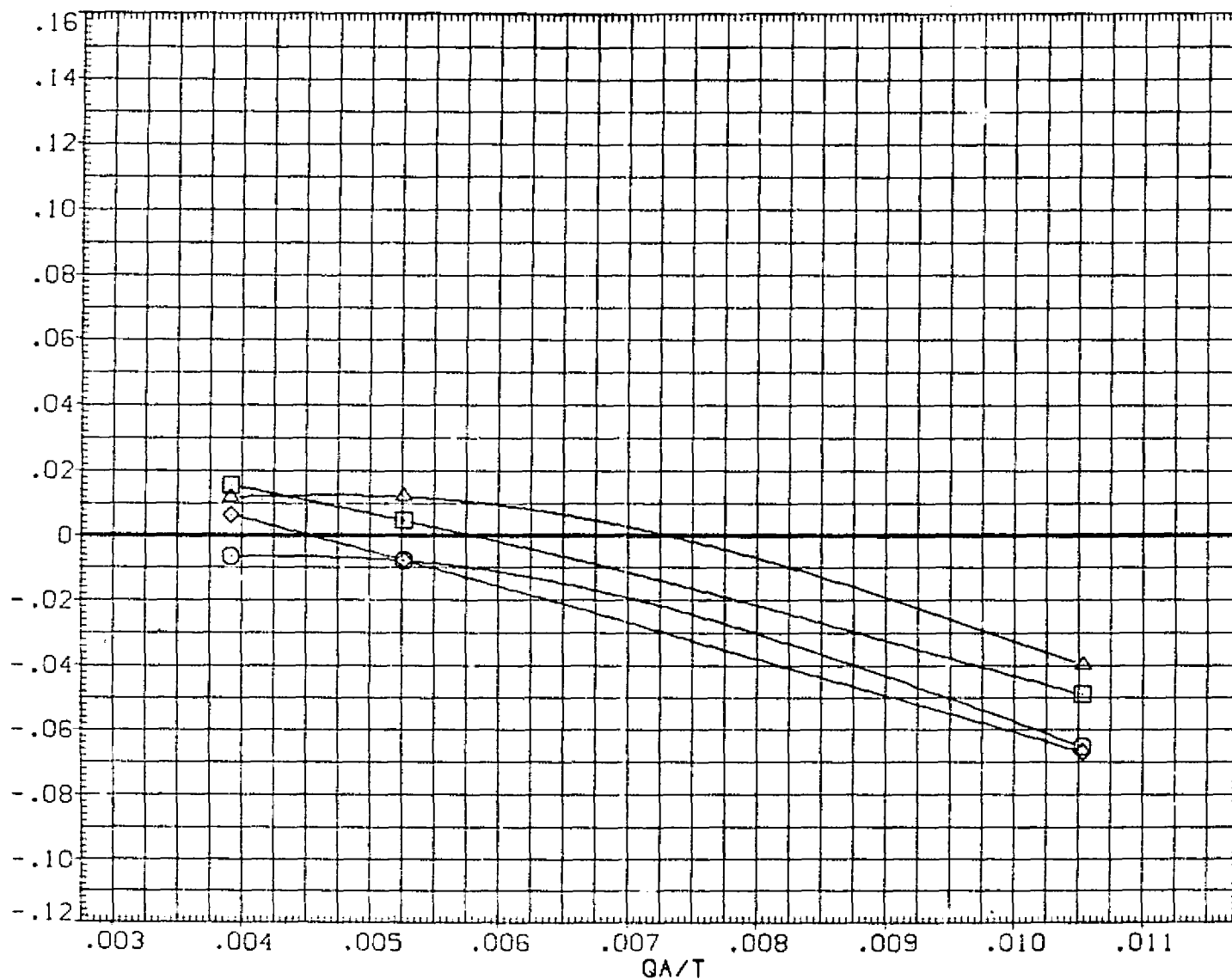


FIGURE 80. EFFECT OF ELEVON/BODY FLAP ON AMPLIFICATION FACTOR, JETS N50N85

(B) ALPHA = .00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA016)	01N85N50 LARC CFHT 118 (MA-22)
(SJA028)	01N85N50 LARC CFHT 118 (MA-22)
(SJA047)	01N85N50 LARC CFHT 118 (MA-22)
(SJA010)	01N85N50 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BD FLAP	BETA	REFERENCE INFORMATION		
.000	2.000	13.750	.000	SREF	269J.0000	50.FT.
10.000	2.000	.000	.000	LREF	474.8000	INCHES
10.000	2.000	13.750	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - YAW, N(YM)

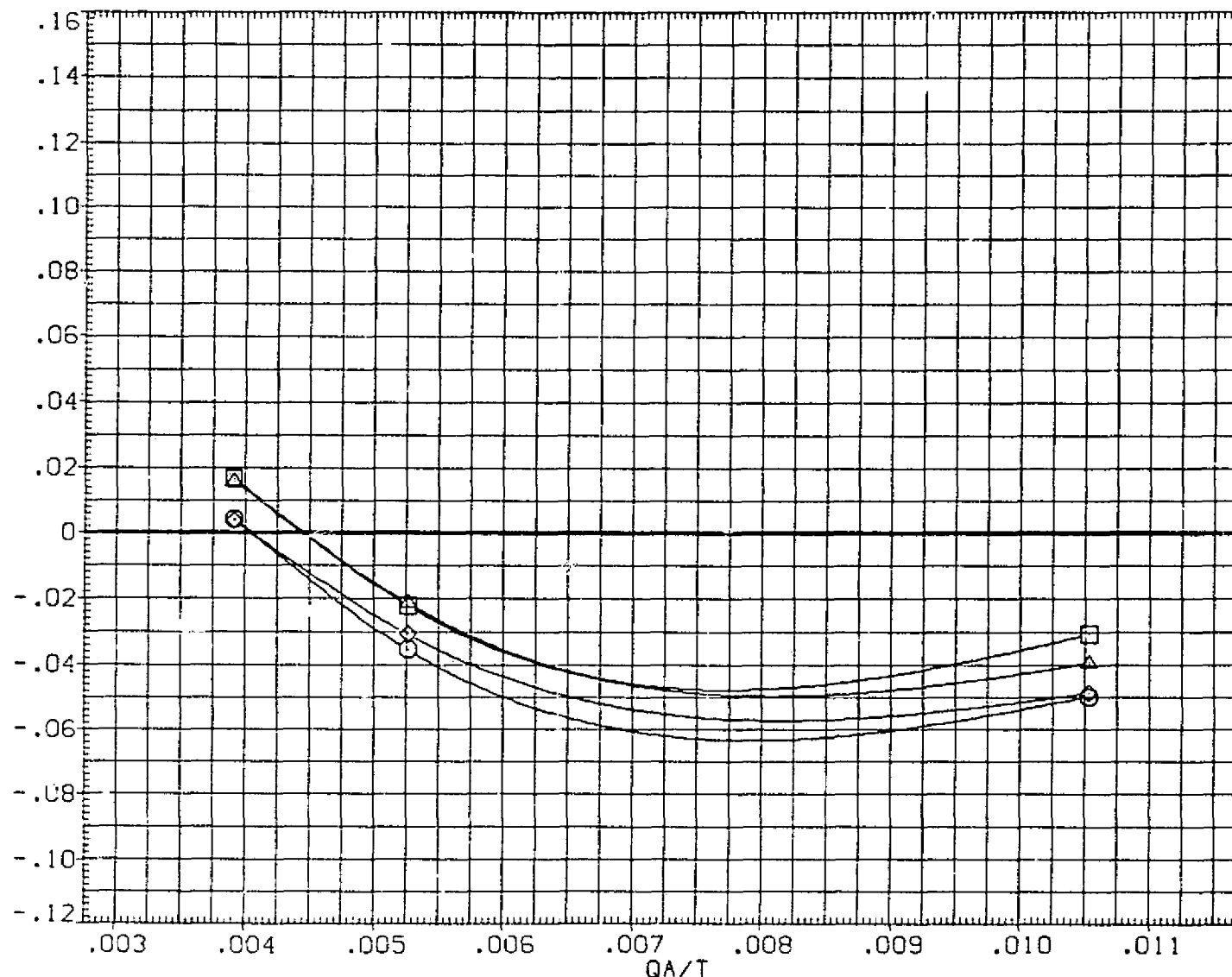


FIGURE 80. EFFECT OF ELEVON/BODY FLAP ON AMPLIFICATION FACTOR, JETS N50N85

(C) ALPHA = 10.00

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION
(SJA016)	□	01N85N50 LARC CFHT 118 (MA-22)
(SJA028)	◇	01N85N50 LARC CFHT 118 (MA-22)
(SJA047)	△	01N85N50 LARC CFHT 118 (MA-22)
(SJA010)	△	01N85N50 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BD FLAP	BETA	REFERENCE INFORMATION	
.000	2.000	13.750	.000	SREF	2690.0000 SQ. FT.
10.000	2.000	.000	.000	LREF	474.8000 INCHES
10.000	2.000	13.750	.000	BREF	936.6800 INCHES
.000	2.000	.000	.000	XMRP	1076.7000 IN. X0
				YMRP	.0000 IN. Y0
				ZMRP	375.0000 IN. Z0
				SCALE	.0100

RCS JET AMPLIFICATION FACTOR - YAW, N(CYM)

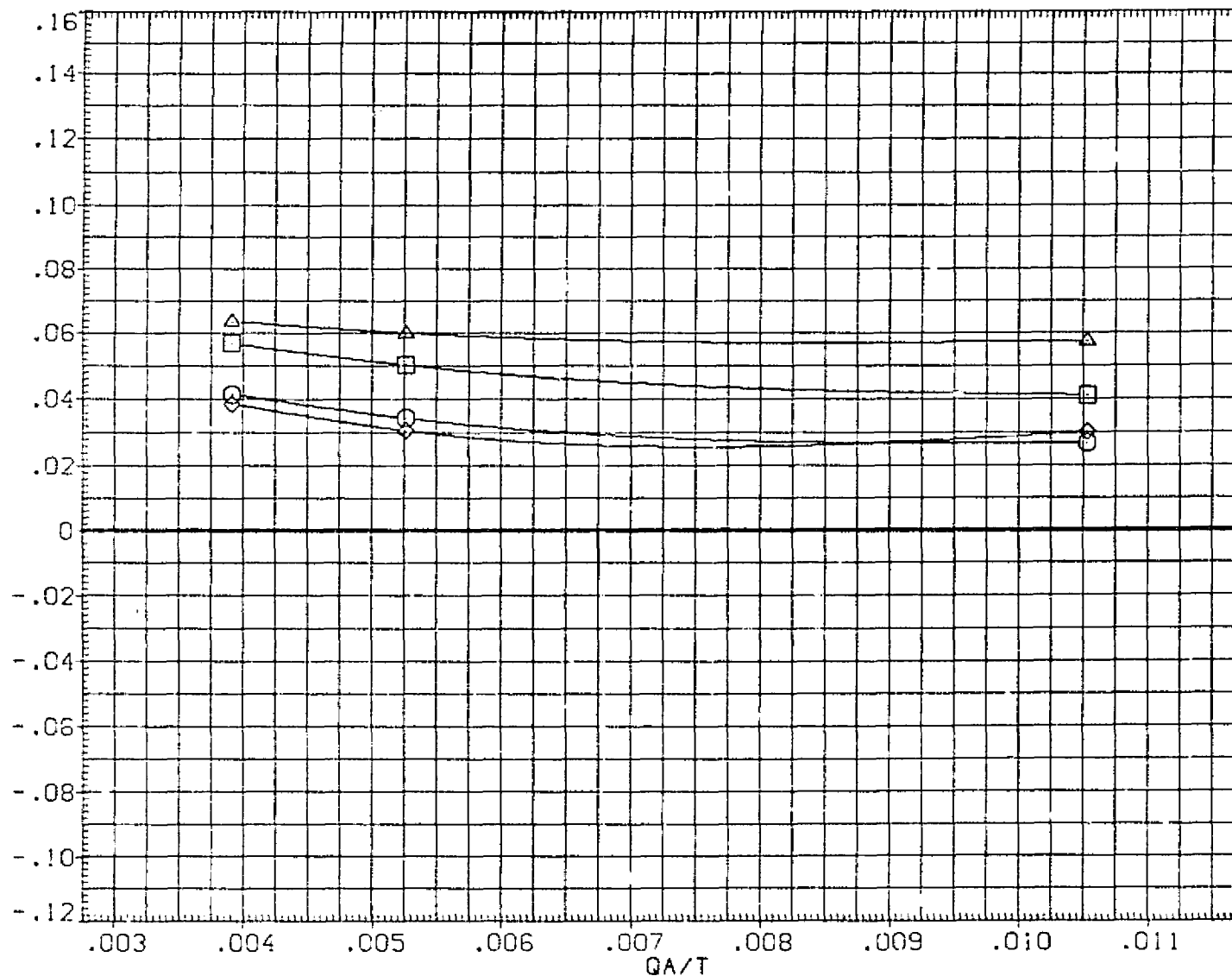


FIGURE 80. EFFECT OF ELEVON/BODY FLAP ON AMPLIFICATION FACTOR, JETS N50N85

(C) ALPHA = 20.00

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DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA016)	01N85N50 LARC CFHT 118 (MA-22)
(SJA028)	01N85N50 LARC CFHT 118 (MA-22)
(SJA047)	01N85N50 LARC CFHT 118 (MA-22)
(SJA010)	01N85N50 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BDFLAP	BETA	REFERENCE INFORMATION		
.000	2.000	13.750	.000	SREF	2690.0000	50. FT.
10.000	2.000	.000	.000	LREF	474.8000	INCHES
10.000	2.000	13.750	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - YAW, N(YM)

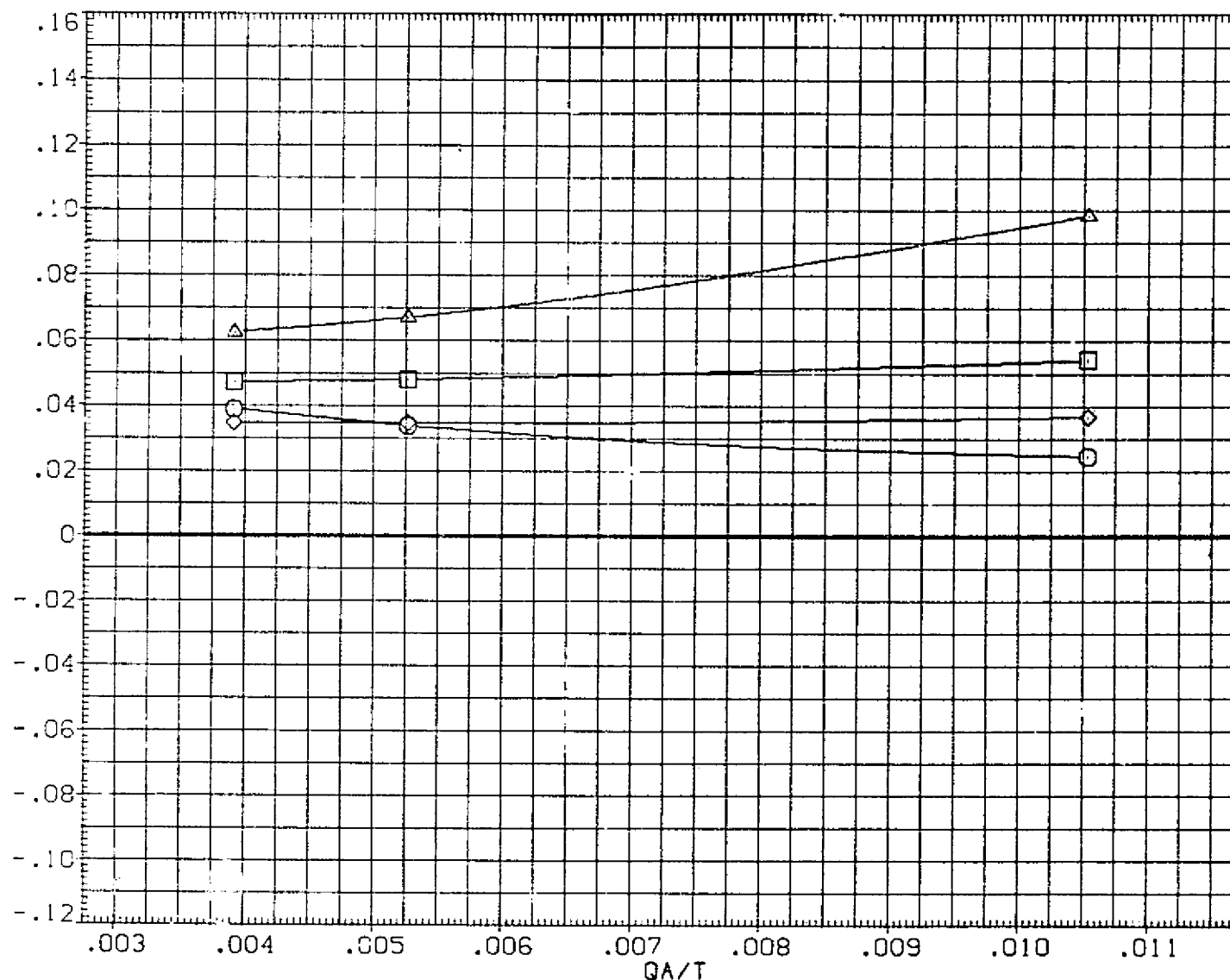


FIGURE 80. EFFECT OF ELEVON/BODY FLAP ON AMPLIFICATION FACTOR, JETS N50N85
(E) ALPHA = 35.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA016)	01N85N50 LARC CFHT 118 (MA-22)
(SJA028)	01N85N50 LARC CFHT 118 (MA-22)
(SJA047)	01N85N50 LARC CFHT 118 (MA-22)
(SJA010)	01N85N50 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BDFLAP	BETA	REFERENCE INFORMATION
.000	2.000	13.750	.000	SREF 2690.0000 SQ.FT.
10.000	2.000	.000	.000	LREF 474.8000 INCHES
10.000	2.000	13.750	.000	BREF 936.6800 INCHES
.000	2.000	.000	.000	XMRP 1076.7000 IN. X0
				YMRP .0000 IN. Y0
				ZMRP 375.0000 IN. Z0
				SCALE .0100

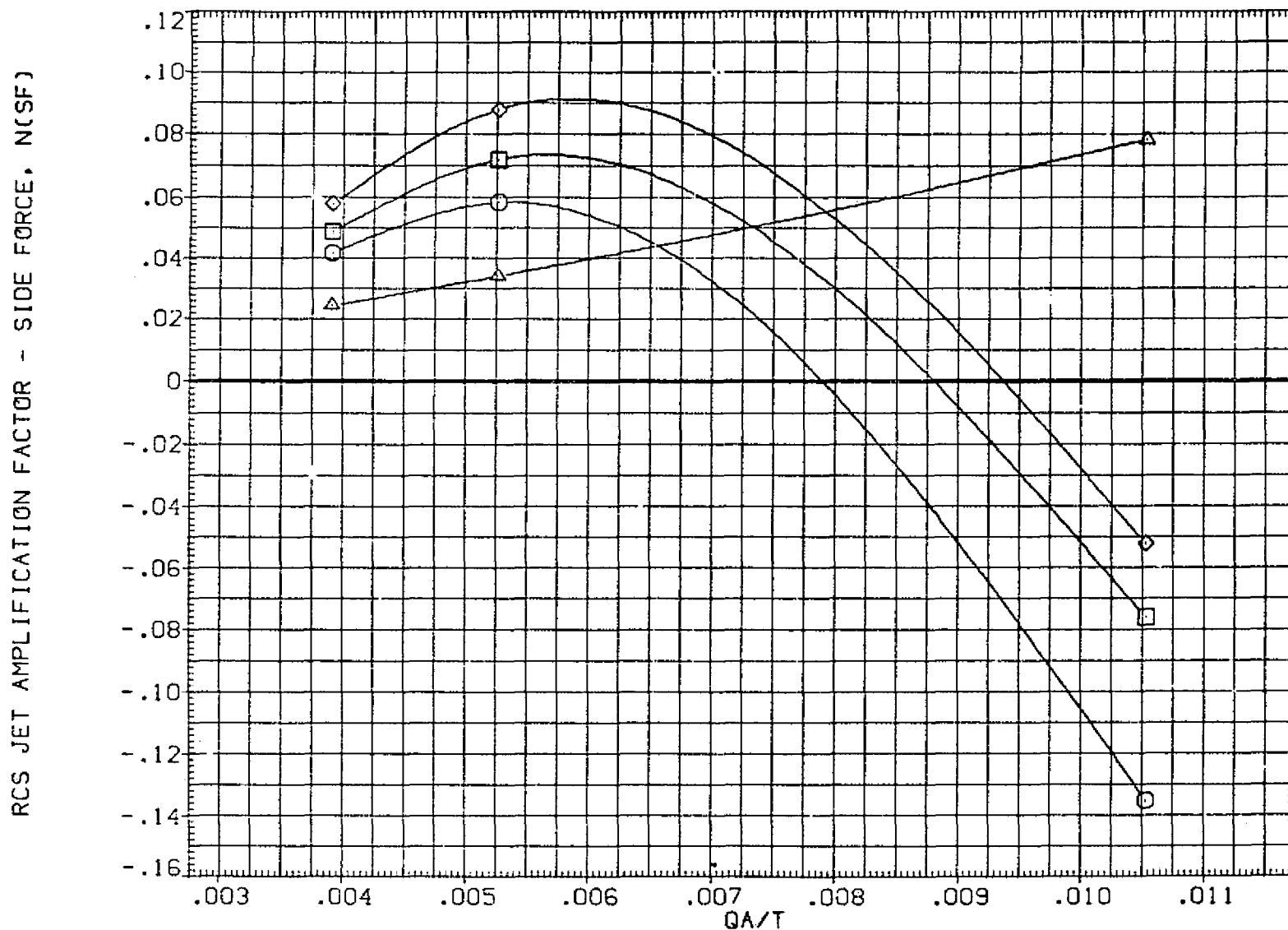


FIGURE 80. EFFECT OF ELEVON/BODY FLAP ON AMPLIFICATION FACTOR, JETS N50N85

(A) ALPHA = -8.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA016)	01N85N50 LARC CFHT 118 (MA-22)
(SJA028)	01N85N50 LARC CFHT 118 (MA-22)
(SJA047)	01N85N50 LARC CFHT 118 (MA-22)
(SJA010)	01N85N50 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BD FLAP	BETA	REFERENCE INFORMATION		
.000	2.000	13.750	.000	SREF	2690.0000	SQ. FT.
10.000	2.000	.000	.000	LREF	474.8000	INCHES
10.000	2.000	13.750	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - SIDE FORCE, N(SF)

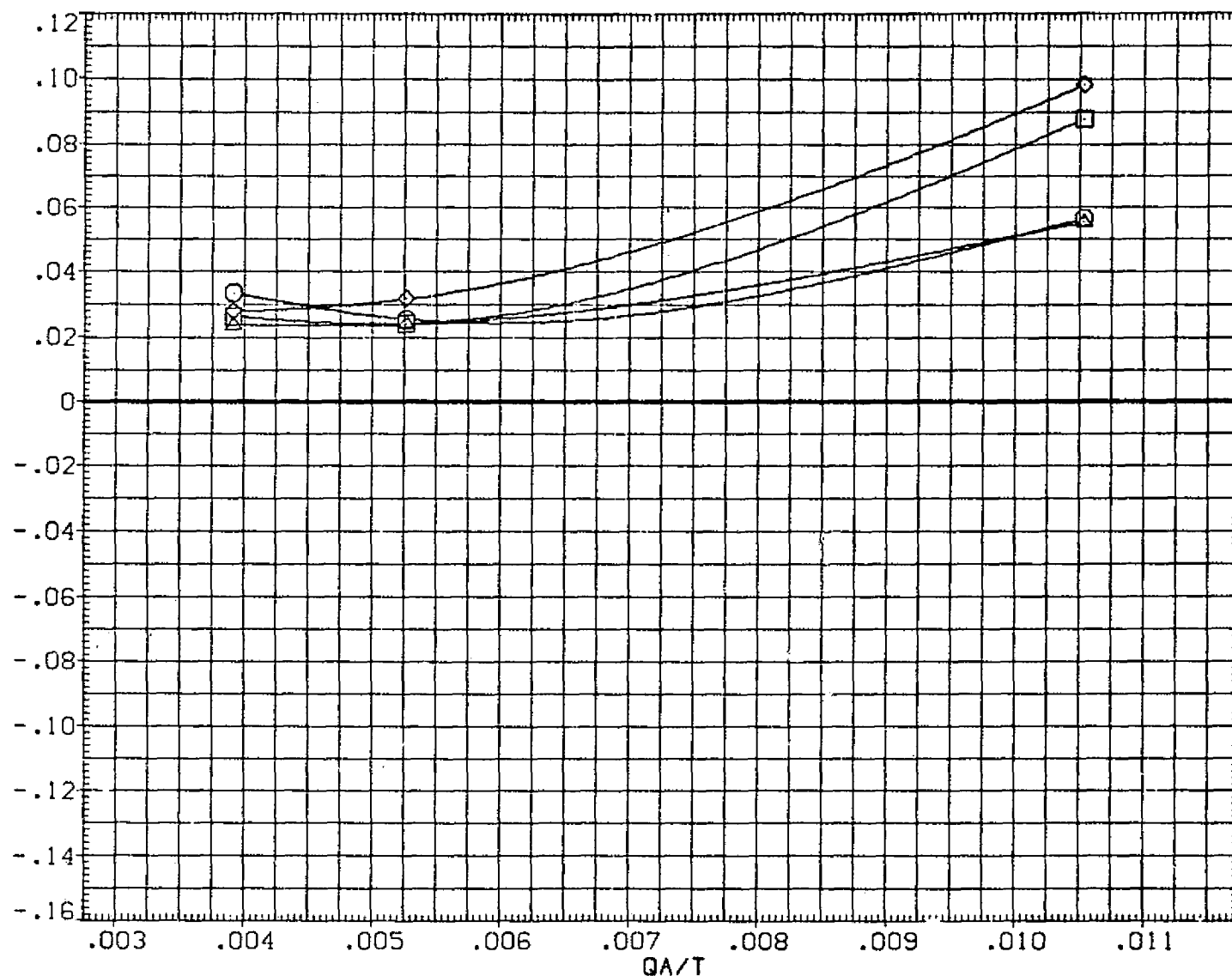


FIGURE 80. EFFECT OF ELEVON/BODY FLAP ON AMPLIFICATION FACTOR, JETS N50N85

(B) ALPHA = .00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA016)	01N85N50 LARC CFHT 118 (MA-22)
(SJA028)	01N85N50 LARC CFHT 118 (MA-22)
(SJA047)	01N85N50 LARC CFHT 118 (MA-22)
(SJA010)	01N85N50 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BDFLAP	BETA	REFERENCE INFORMATION
.000	2.000	13.750	.000	SREF 2690.0000 SQ.FT.
10.000	2.000	.000	.000	LREF 474.8000 INCHES
10.000	2.000	13.750	.000	BREF 936.6800 INCHES
.000	2.000	.000	.000	XMRP 1076.7000 IN. X0
				YMRP .0000 IN. Y0
				ZMRP 375.0000 IN. Z0
				SCALE .0100



FIGURE 80. EFFECT OF ELEVON/BODY FLAP ON AMPLIFICATION FACTOR, JETS N50N85

(C) ALPHA = 10.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA016)	01N85N50 LARC CFHT 118 (MA-22)
(SJA028)	01N85N50 LARC CFHT 118 (MA-22)
(SJA047)	01N85N50 LARC CFHT 118 (MA-22)
(SJA010)	01N85N50 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BD FLAP	BETA	REFERENCE INFORMATION		
.000	2.000	13.750	.000	SREF	2690.0000	SQ. FT.
10.000	2.000	.000	.000	LREF	474.8000	INCHES
10.000	2.000	13.750	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.0100	

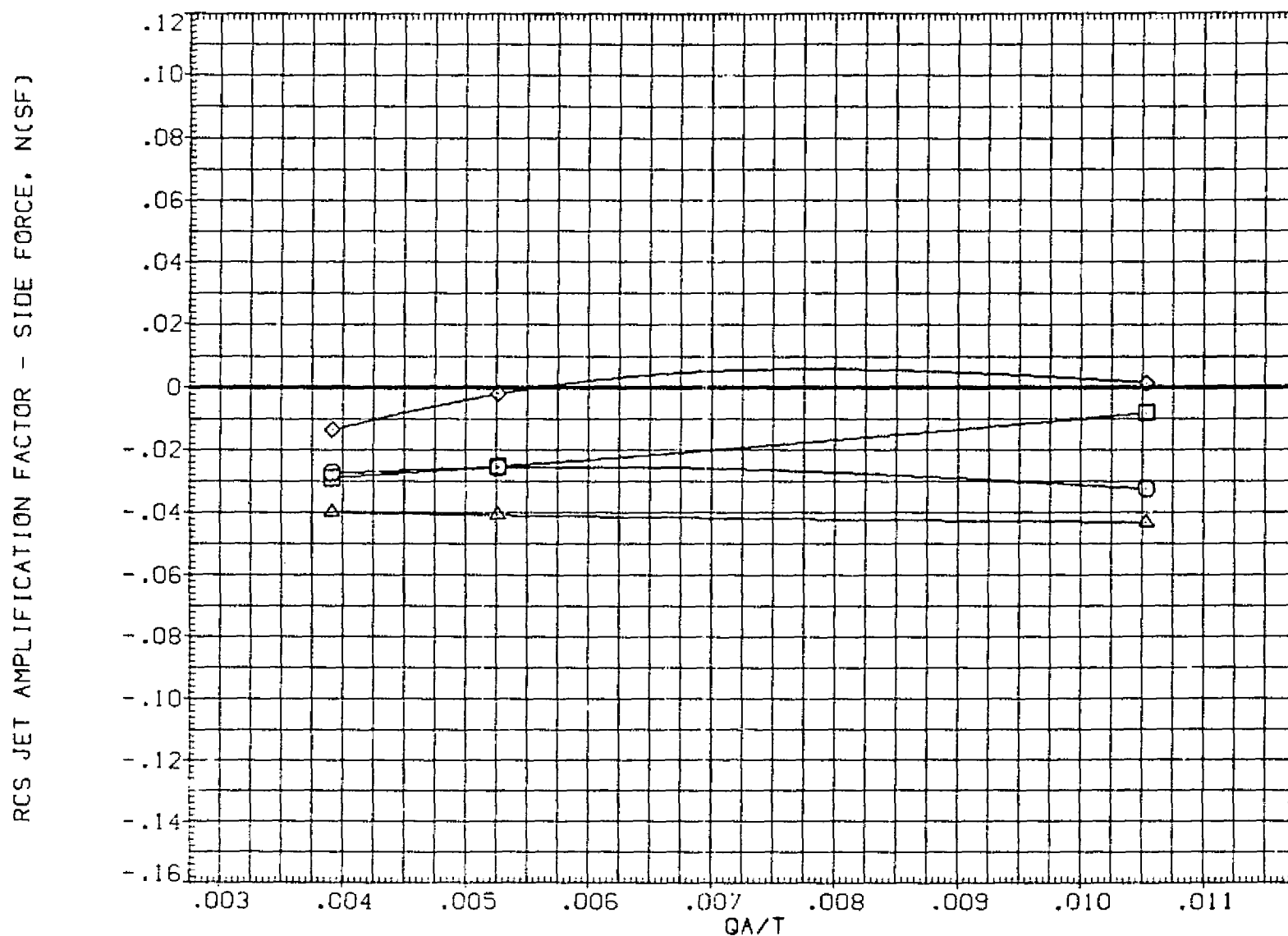


FIGURE 80. EFFECT OF ELEVON/BODY FLAP ON AMPLIFICATION FACTOR, JETS N50N85

(D) ALPHA = 20.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA016) ○	01N85N50 LARC CFHT 118 (MA-22)
(SJA028) □	01N85N50 LARC CFHT 118 (MA-22)
(SJA047) ◇	01N85N50 LARC CFHT 118 (MA-22)
(SJA010) △	01N85N50 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BD FLAP	BETA	REFERENCE INFORMATION		
.000	2.000	13.750	.000	SREF	2690.0000	30 FT.
10.000	2.000	.000	.000	LREF	474.8000	INCHES
10.000	2.000	13.750	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.0100	

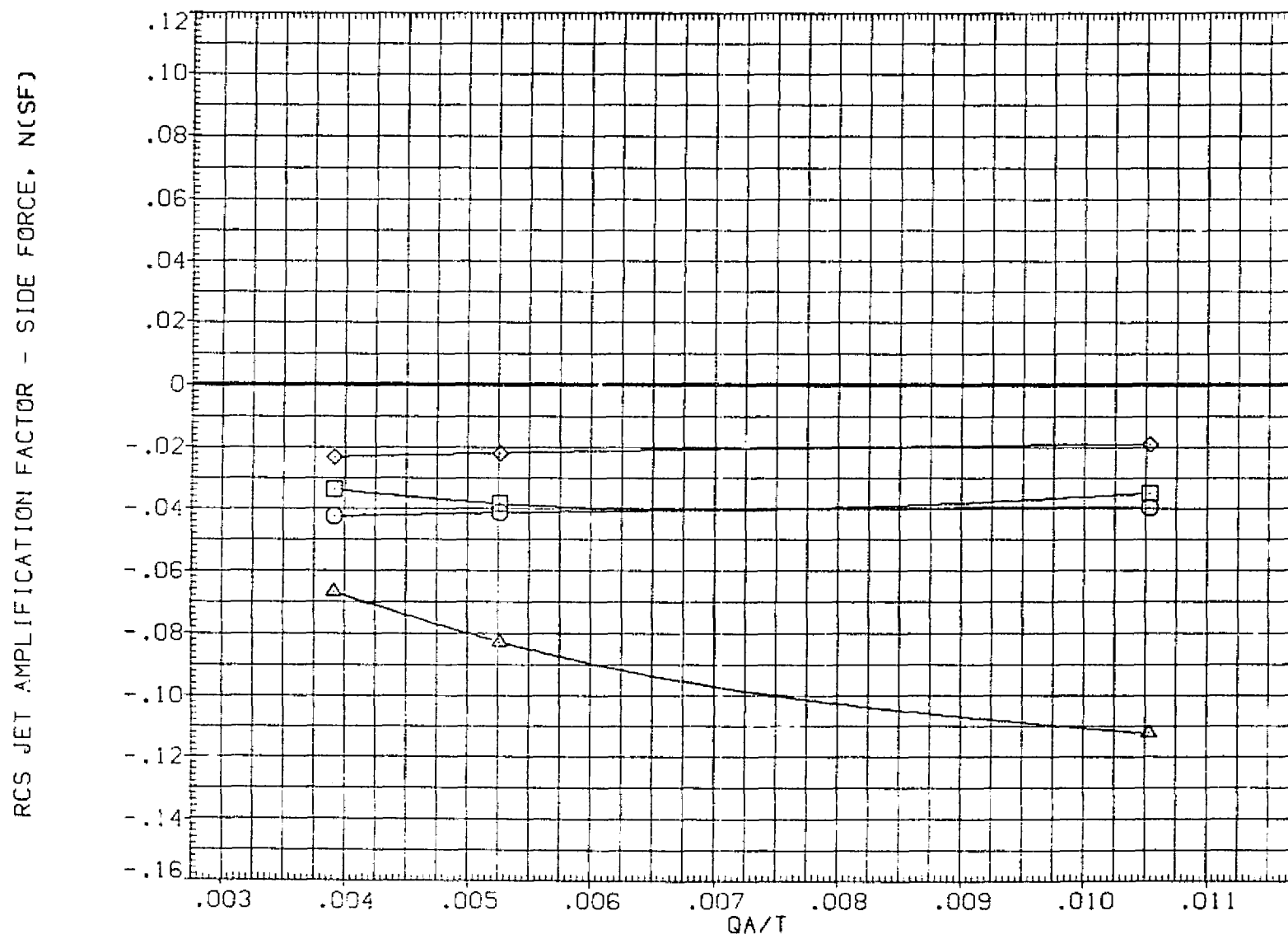


FIGURE 80. EFFECT OF ELEVON/BODY FLAP ON AMPLIFICATION FACTOR, JETS N50N85

(E) ALPHA = 35.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA020)	01N79N78 LARC CFHT 118 (MA-22)
(SJA027)	01N79N78 LARC CFHT 118 (MA-22)
(SJA048)	01N79N78 LARC CFHT 118 (MA-22)
(XJA009)	01N79N78 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BD FLAP	BETA	REFERENCE INFORMATION
.000	2.000	-14.250	.000	SREF 2690.0000 SQ. FT.
10.000	2.000	.000	.000	LREF 474.8000 INCHES
10.000	2.000	-14.250	.000	BREF 936.6800 INCHES
.000	2.000	.000	.000	XMRP 1076.7000 IN. X0
				YMRP .0000 IN. Y0
				ZMRP 375.0000 IN. Z0
				SCALE .0100

RCS JET AMPLIFICATION FACTOR - NORMAL FORCE, N(NF)

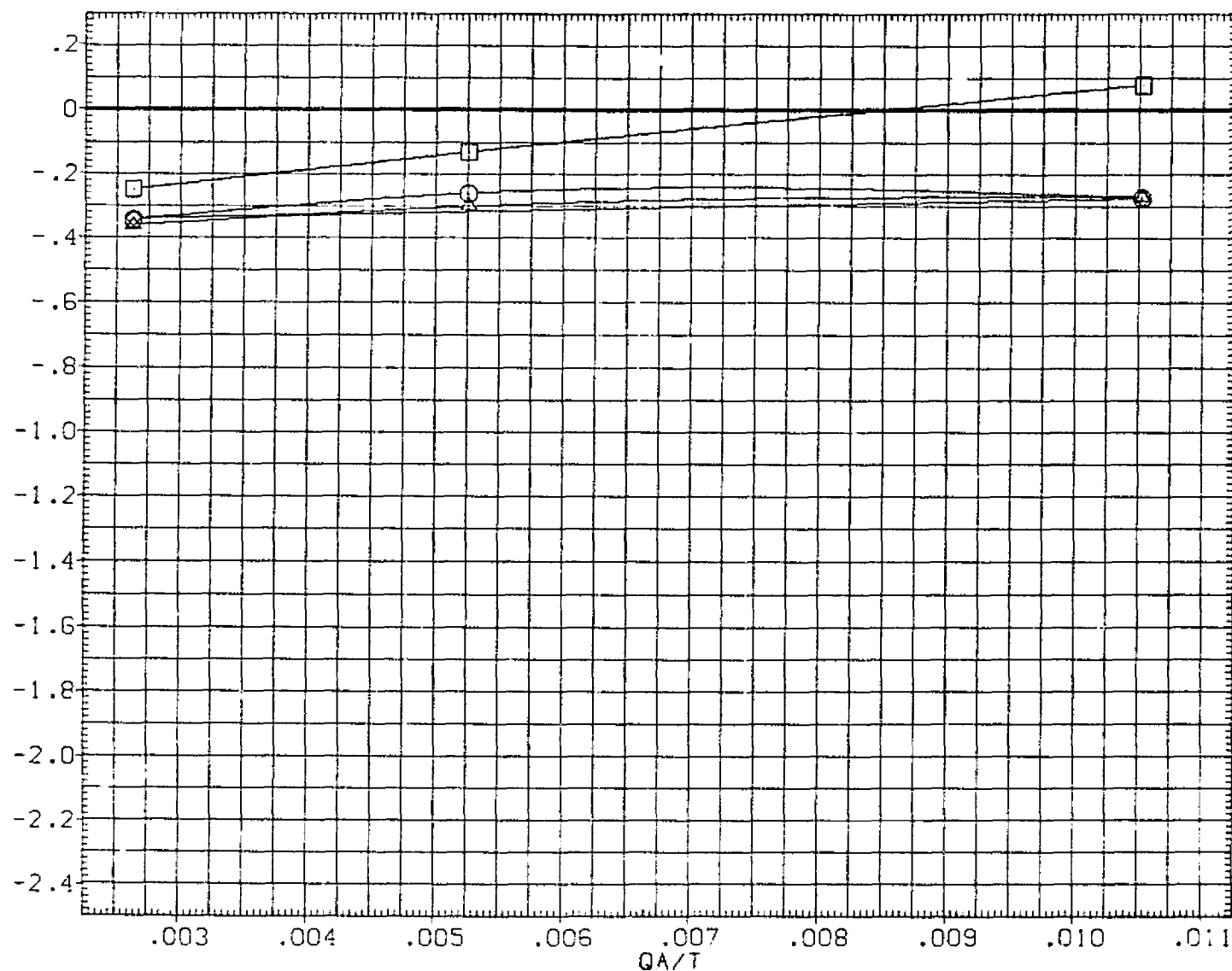


FIGURE 81. EFFECT OF ELEVON/BODY FLAP ON AMPLIFICATION FACTOR, JETS N79N78

(A) ALPHA = -8.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA020)	01N79N78 LARC CFHT 118 (MA-22)
(SJA027)	01N79N78 LARC CFHT 118 (MA-22)
(SJA048)	01N79N78 LARC CFHT 118 (MA-22)
(XJA009)	01N79N78 LARC CFHT 118 (MA-22)

ELEVON	NCJET	BDFLAP	BETA	REFERENCE INFORMATION
.000	2.000	-14.250	.000	SREF 2690.0000 50.FT.
10.000	2.000	.000	.000	LREF 474.8000 INCHES
10.000	2.000	-14.250	.000	BREF 936.6800 INCHES
.000	2.000	.000	.000	XMRP 1076.7000 IN. X0
				YMRP .0000 IN. Y0
				ZMRP 375.0000 IN. Z0
				SCALE .0100

RCS JET AMPLIFICATION FACTOR - NORMAL FORCE, N(NF)

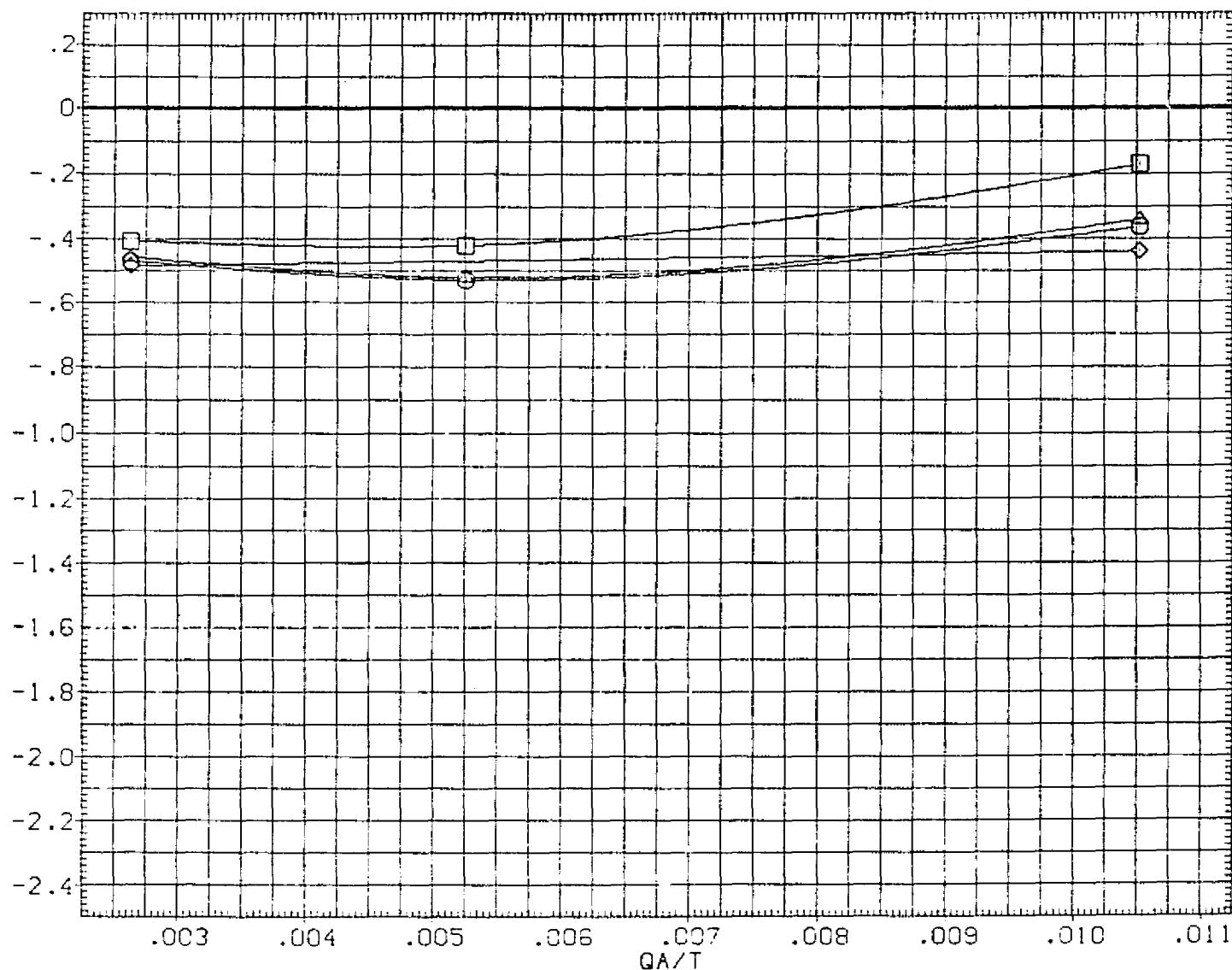


FIGURE 81. EFFECT OF ELEVON/BODY FLAP ON AMPLIFICATION FACTOR, JETS N79N78

(B) ALPHA = .00

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DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA020)	01N79N78 LARC CFHT 118 (MA-22)
(SJA027)	01N79N78 LARC CFHT 118 (MA-22)
(SJA048)	01N79N78 LARC CFHT 118 (MA-22)
(XJA009)	01N79N78 LARC CFHT 118 (MA-22)

ELEVON	NO.JET	BOFLAP	BETA	REFERENCE INFORMATION		
.000	2.000	-14.250	.000	SREF	2690.0000	50. FT.
10.000	2.000	.000	.000	LREF	474.8000	INCHES
10.000	2.000	-14.250	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - NORMAL FORCE, N(NF)

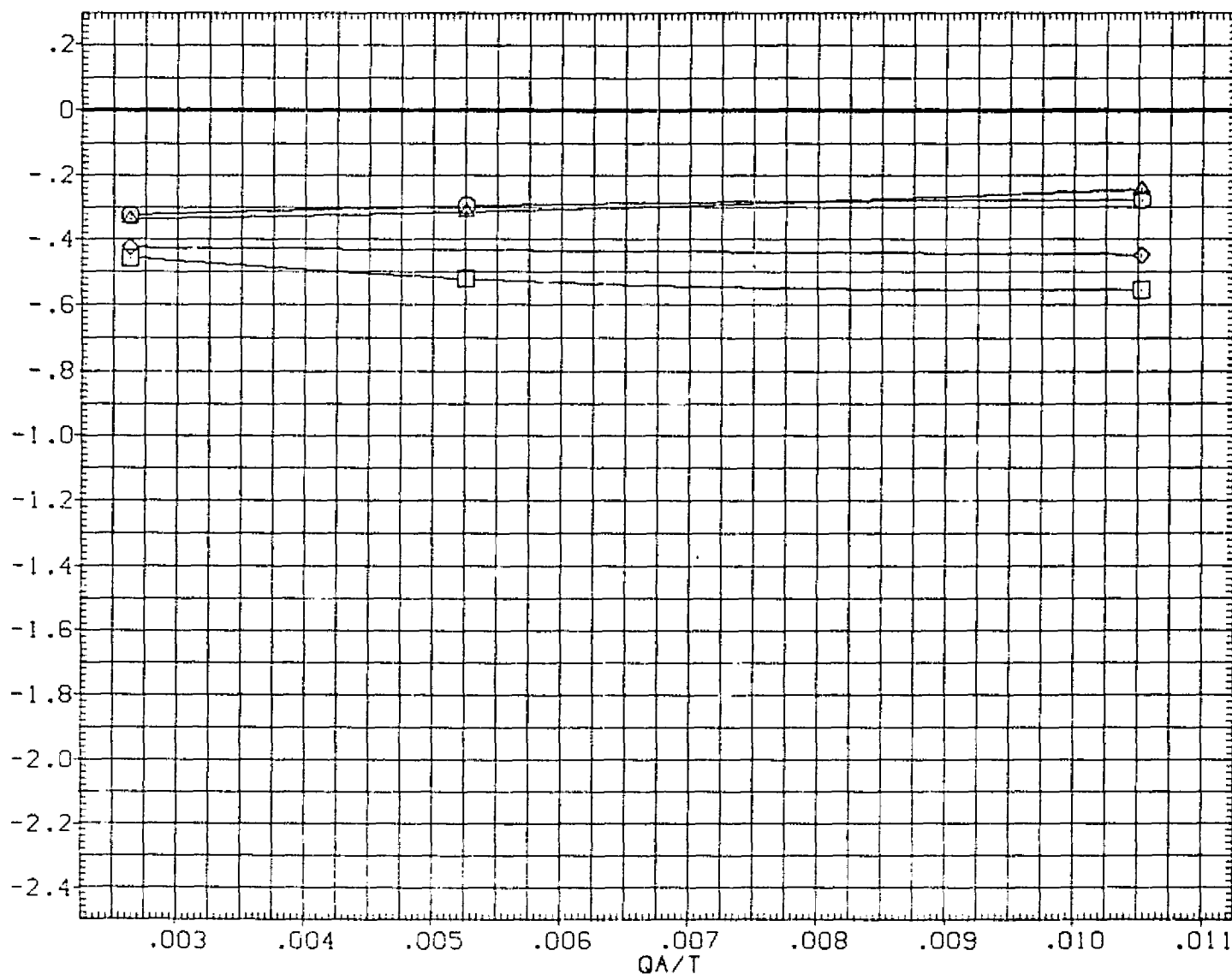


FIGURE 81. EFFECT OF ELEVON/BODY FLAP ON AMPLIFICATION FACTOR, JETS N79N78

(C) ALPHA = 10.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA020)	01N79N78 LARC CFHT 118 (MA-22)
(SJA027)	01N79N78 LARC CFHT 118 (MA-22)
(SJA048)	01N79N78 LARC CFHT 118 (MA-22)
(XJA009)	01N79N78 LARC CFHT 118 (MA-22)

ELEVON	NJ.JET	BDFLAP	BETA	REFERENCE INFORMATION
.000	2.000	-14.250	.000	SREF 2690.0000 SQ. FT.
10.000	2.000	.000	.000	LREF 474.8000 INCHES
10.000	2.000	-14.250	.000	BREF 936.6800 INCHES
.000	2.000	.000	.000	XMRP 1076.7000 IN. X0
				YMRP .0000 IN. Y0
				ZMRP 375.0000 IN. Z0
				SCALE .0100

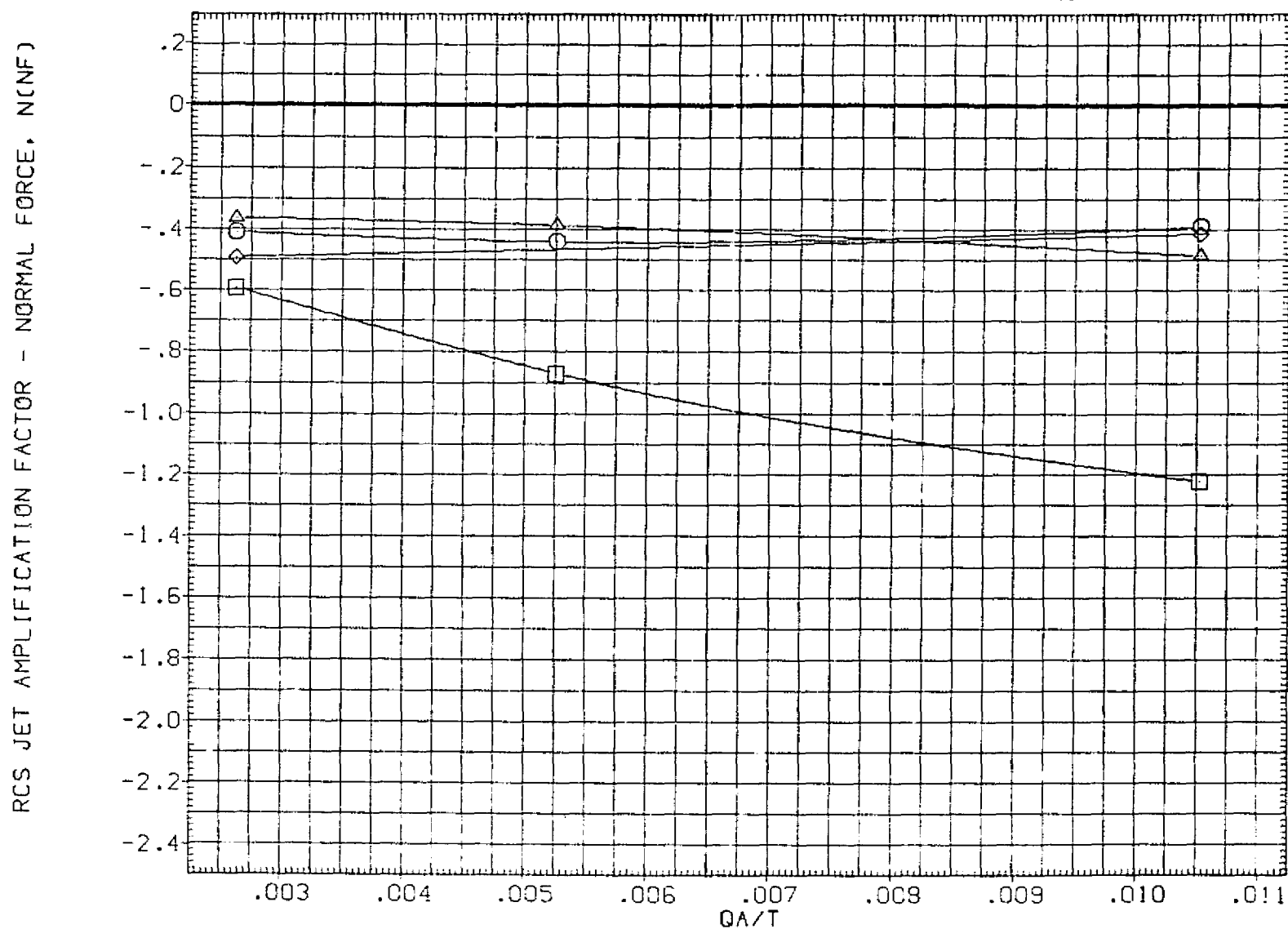


FIGURE 81. EFFECT OF ELEVON/BODY FLAP ON AMPLIFICATION FACTOR, JETS N79N78

(O) ALPHA = 20.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA020)	01N79N78 LARC CFHT 118 (MA-22)
(SJA027)	01N79N78 LARC CFHT 118 (MA-22)
(SJA048)	01N79N78 LARC CFHT 118 (MA-22)
(XJA009)	01N79N78 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BD FLAP	BETA	REFERENCE INFORMATION
.000	2.000	-14.250	.000	SREF 2690.0000 SQ. FT.
10.000	2.000	.000	.000	LREF 474.8000 INCHES
10.000	2.000	-14.250	.000	BREF 936.6800 INCHES
.000	2.000	.000	.000	XMRP 1076.7000 IN. X0
				YMRP .0000 IN. Y0
				ZMRP 375.0000 IN. Z0
				SCALE .0100

RCS JET AMPLIFICATION FACTOR - NORMAL FORCE, N(NF)

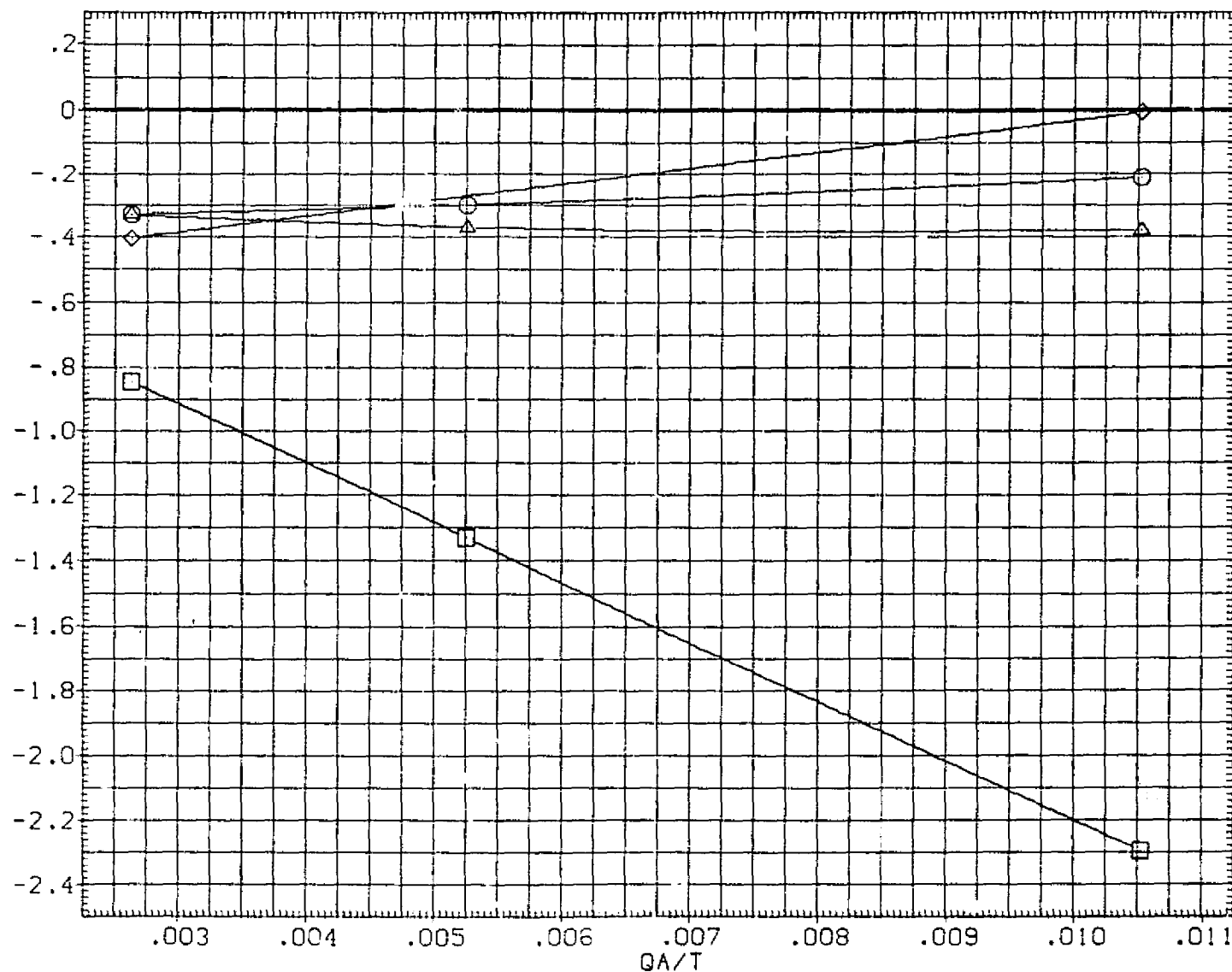


FIGURE 81. EFFECT OF ELEVON/BODY FLAP ON AMPLIFICATION FACTOR, JETS N79N78

(E)ALPHA = 35.00

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION
(SJA020)	□	01N79N78 LARC CFHT 119 (MA-22)
(SJA027)	○	01N79N78 LARC CFHT 118 (MA-22)
(SJA048)	◇	01N79N78 LARC CFHT 118 (MA-22)
(XJA009)	△	01N79N78 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BD FLAP	BETA	REFERENCE INFORMATION
.000	2.000	-14.250	.000	SREF 2690.0000 SQ. FT.
10.000	2.000	.000	.000	LREF 474.8000 INCHES
10.000	2.000	-14.250	.000	BREF 936.6800 INCHES
.000	2.000	.000	.000	XMRP 1076.7000 IN. X0
				YMRP .0000 IN. Y0
				ZMRP 375.0000 IN. Z0
				SCALE .0100

RCS JET AMPLIFICATION FACTOR - PITCH, N(PM)

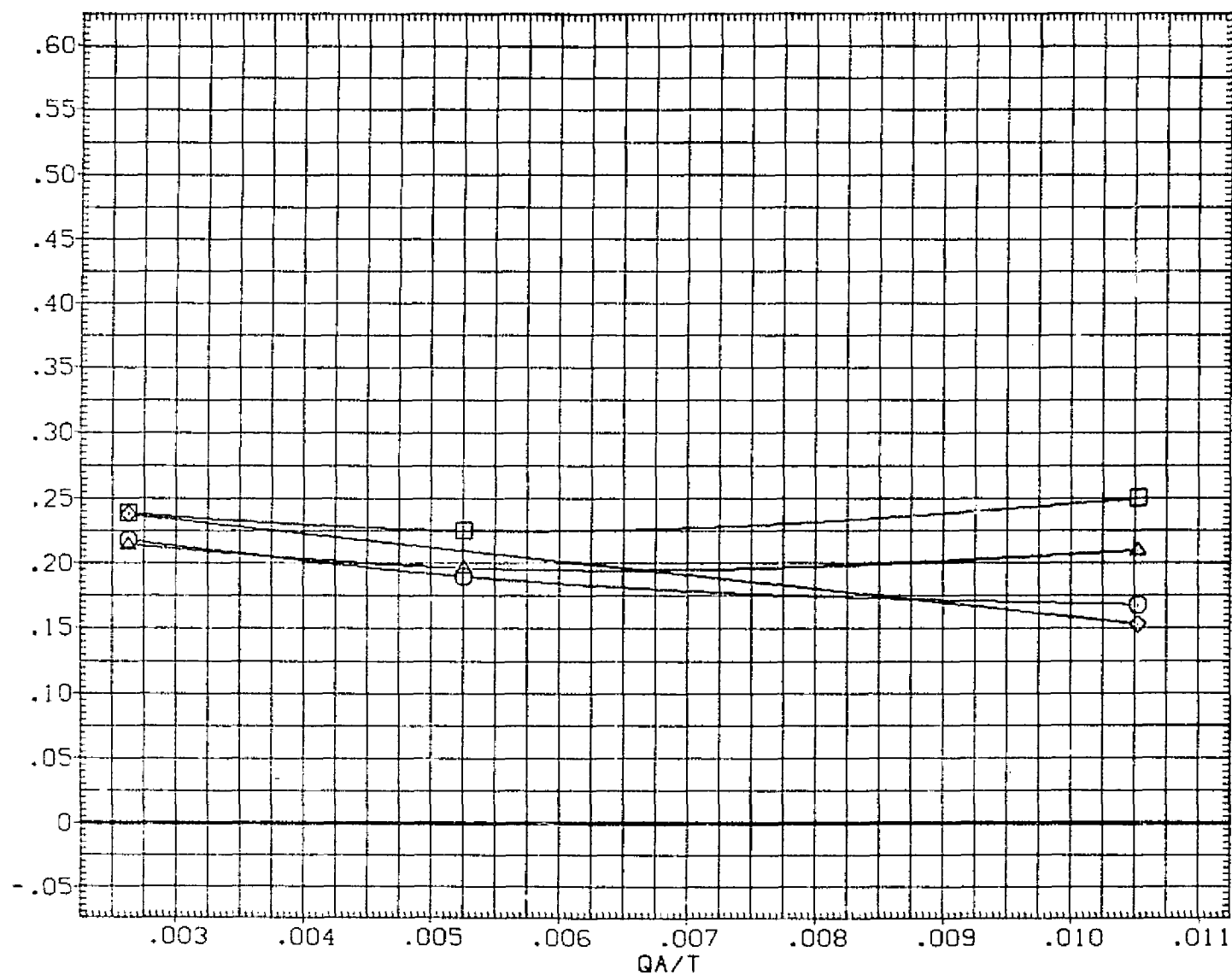


FIGURE 81. EFFECT OF ELEVON/BODY FLAP ON AMPLIFICATION FACTOR, JETS N79N78

(A) ALPHA = -8.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA020)	01N79N78 LARC CFHT 118 (MA-22)
(SJA027)	01N79N78 LARC CFHT 118 (MA-22)
(SJA048)	01N79N78 LARC CFHT 118 (MA-22)
(XJA009)	01N79N78 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BD FLAP	BETA	REFERENCE INFORMATION		
.000	2.000	-14.250	.000	SREF	2690.0000	SQ. FT.
10.000	2.000	.000	.000	LREF	474.8000	INCHES
10.000	2.000	-14.250	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - PITCH, N(PM)

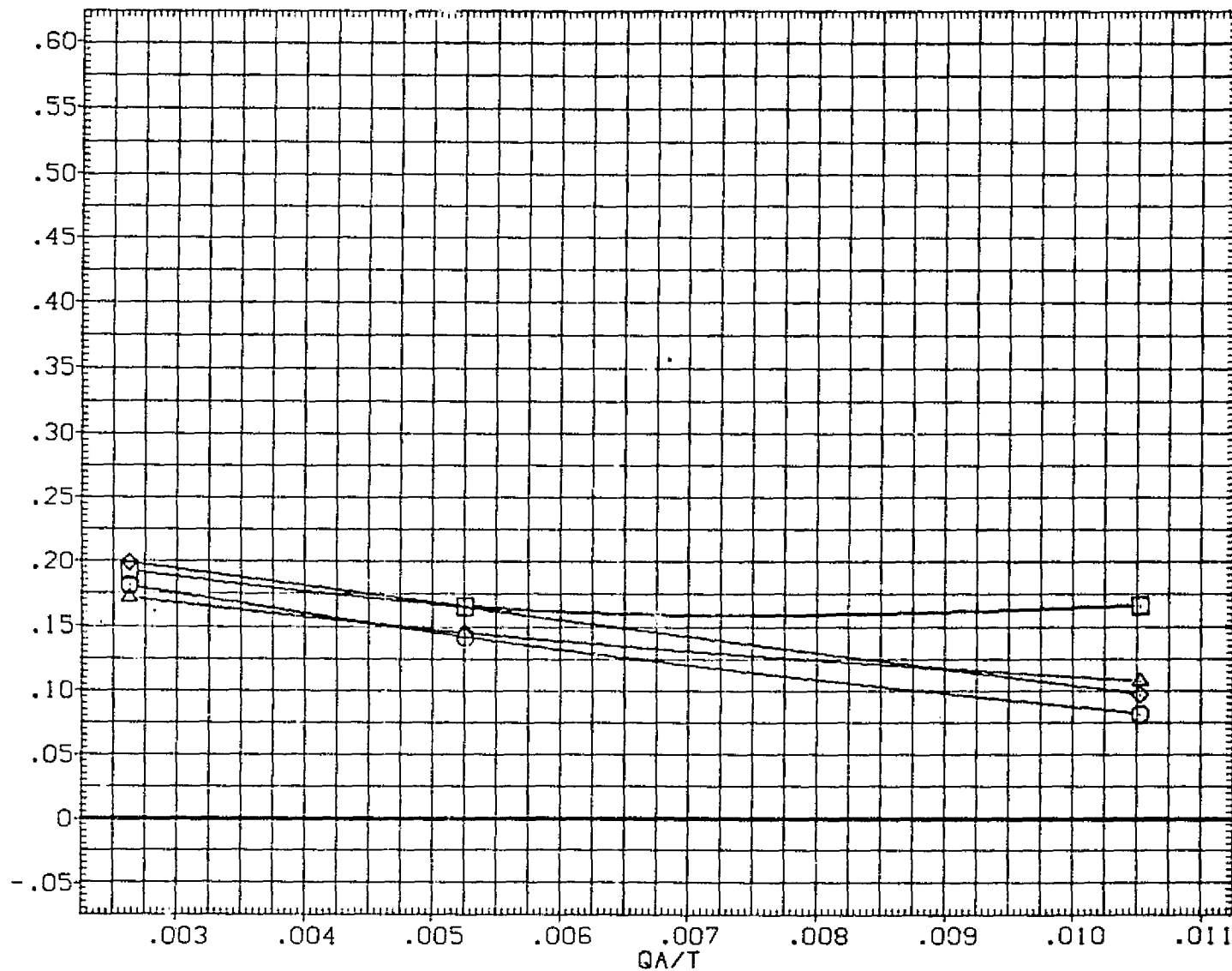


FIGURE 81. EFFECT OF ELEVON/BODY FLAP ON AMPLIFICATION FACTOR, JETS N79N78

(B) ALPHA = .00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA020)	01N79N78 LARC CFHT 118 (MA-22)
(SJA027)	01N79N78 LARC CFHT 118 (MA-22)
(SJA048)	01N79N78 LARC CFHT 118 (MA-22)
(XJA009)	01N79N78 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BDFLAP	BETA	REFERENCE INFORMATION		
.000	2.000	-14.250	.000	SREF	2690.0000	SQ. FT.
10.000	2.000	.000	.000	LREF	474.8000	INCHES
10.000	2.000	-14.250	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - PITCH, N(PM)

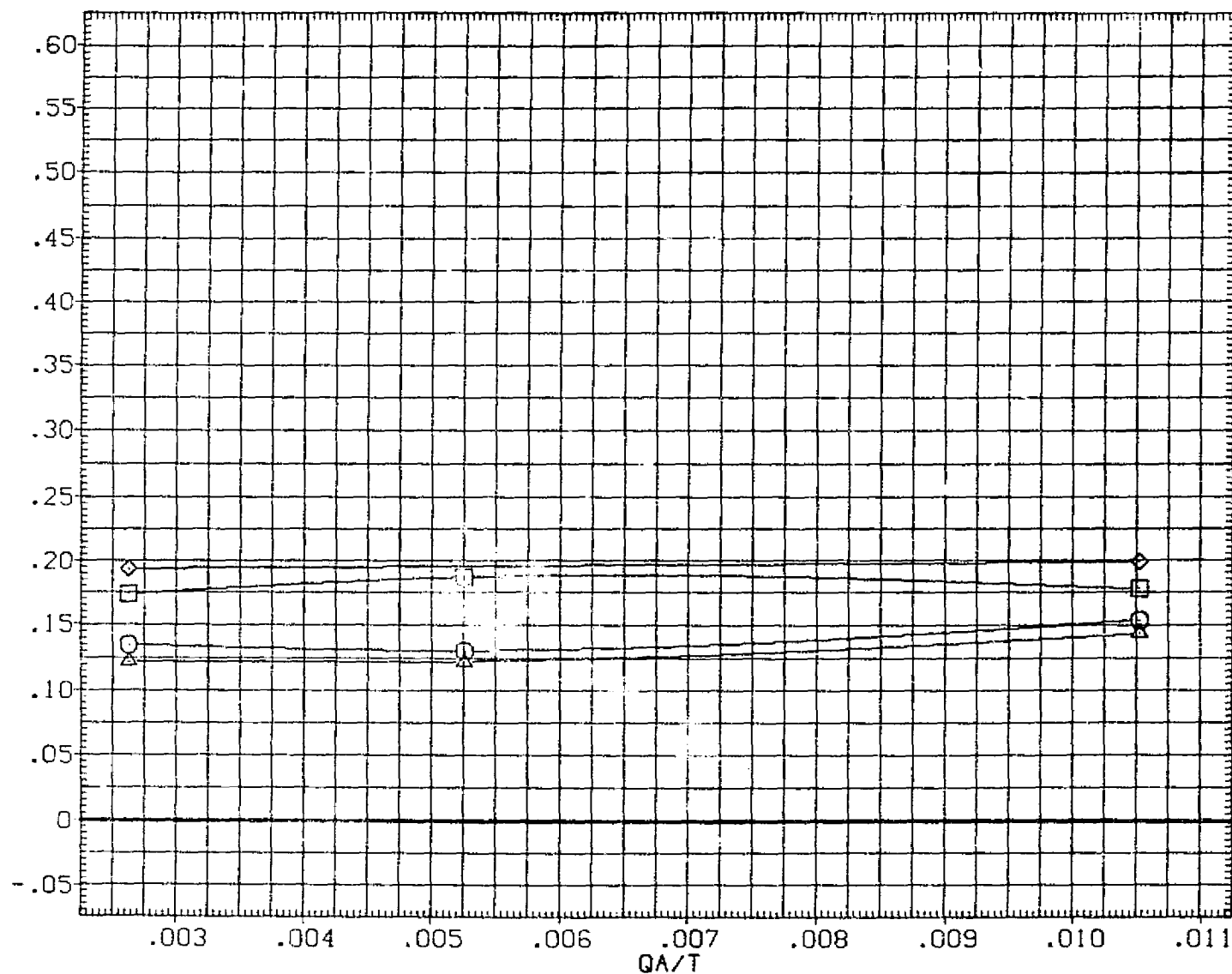


FIGURE 81. EFFECT OF ELEVON/BODY FLAP ON AMPLIFICATION FACTOR, JETS N79N78

(C) ALPHA = 10.00

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(SJA020)	○	01N79N78 LARC CFHT 118 (MA-22)
(SJA027)	□	01N79N78 LARC CFHT 118 (MA-22)
(SJA048)	◇	01N79N78 LARC CFHT 118 (MA-22)
(XJA009)	△	01N79N78 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BD FLAP	BETA	REFERENCE INFORMATION		
.000	2.000	-14.250	.000	SREF	2690.0000	50. FT.
10.000	2.000	.000	.000	LREF	474.8000	INCHES
10.000	2.000	-14.250	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XM RP	1076.7000	IN. X0
				YM RP	.0000	IN. Y0
				ZM RP	375.0000	IN. Z0
				SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - PITCH, N(PM)

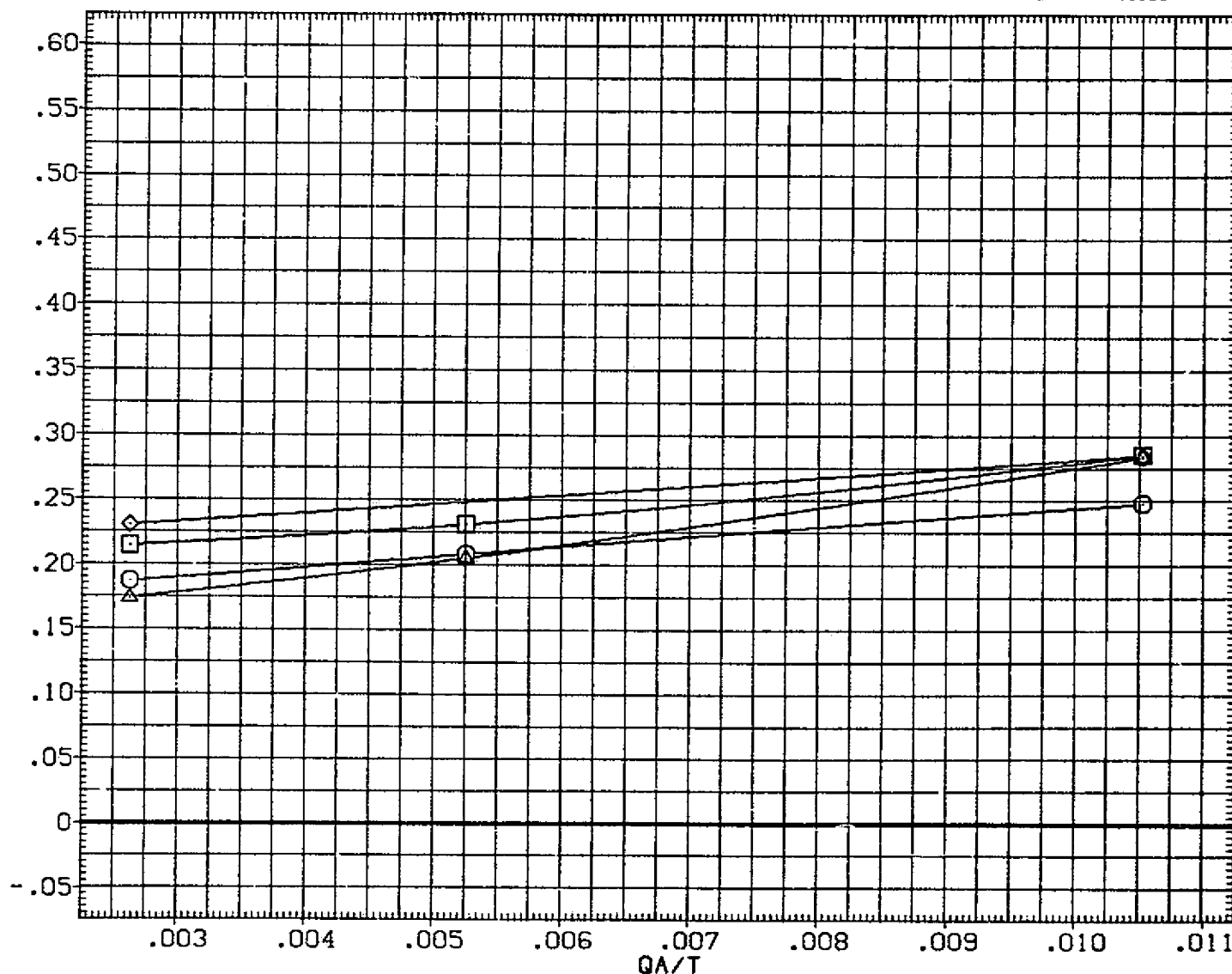


FIGURE 81. EFFECT OF ELEVON/BODY FLAP ON AMPLIFICATION FACTOR, JETS N79N78
(D) ALPHA = 20.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA020)	01N79N78 LARC CFHT 118 (MA-22)
(SJA027)	01N79N78 LARC CFHT 118 (MA-22)
(SJA048)	01N79N78 LARC CFHT 118 (MA-22)
(XJA009)	01N79N78 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BDFLAP	BETA	REFERENCE INFORMATION		
.000	2.000	-14.250	.000	SREF	2690.0000	SQ. FT.
10.000	2.000	.000	.000	LREF	474.8000	INCHES
10.000	2.000	-14.250	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. XO
				YMRP	.0000	IN. YO
				ZMRP	375.0000	IN. ZO
				SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - PITCH, N(PM)

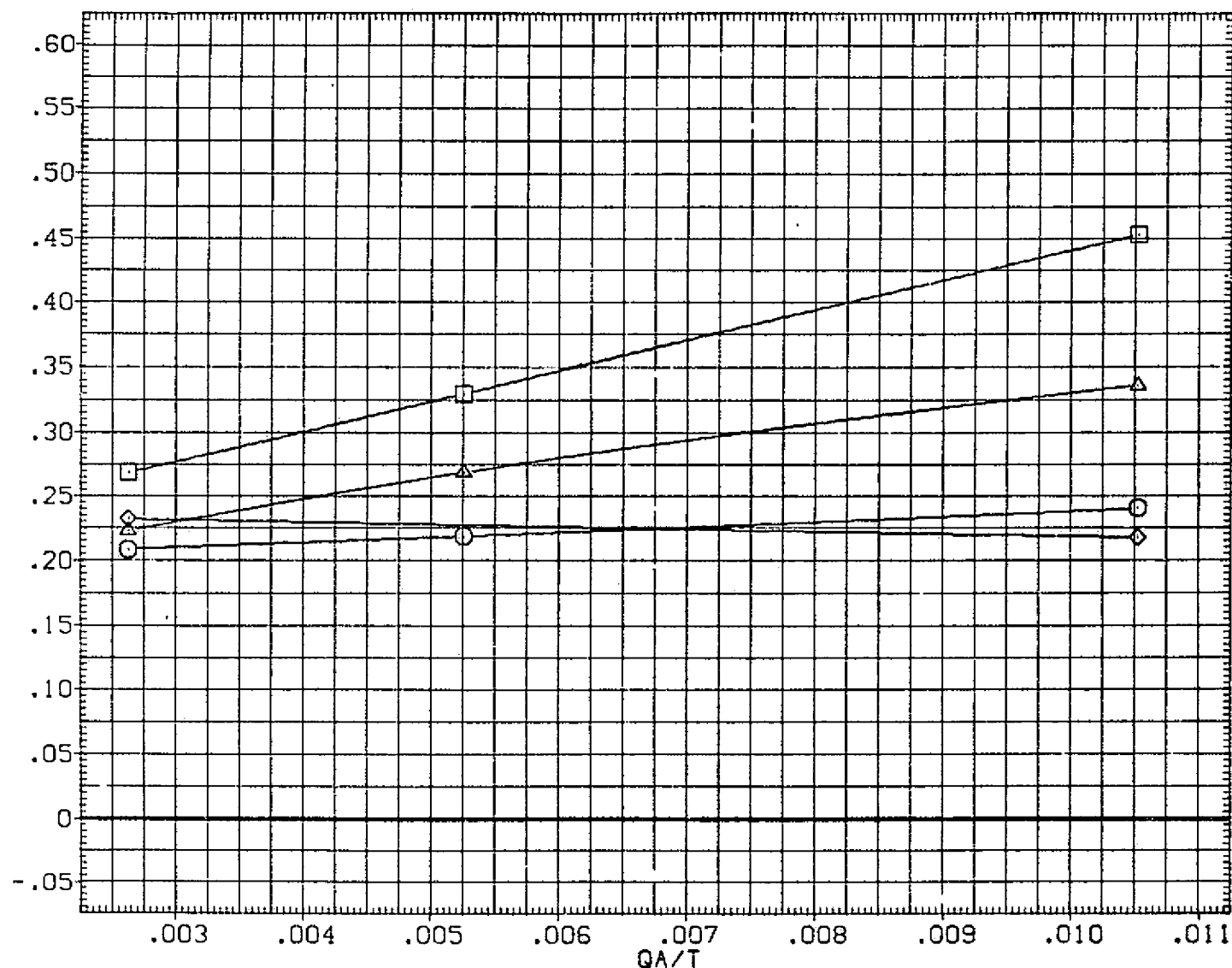


FIGURE 81. EFFECT OF ELEVON/BODY FLAP ON AMPLIFICATION FACTOR, JETS N79N78

(E) ALPHA = 35.00

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DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA020)	01N79N78 LARC CFHT 118 (MA-22)
(SJA027)	01N79N78 LARC CFHT 118 (MA-22)
(SJA048)	01N79N78 LARC CFHT 118 (MA-22)
(XJA009)	01N79N78 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BDFLAP	BETA	REFERENCE INFORMATION
.000	2.000	-14.250	.000	SREF 2690.0000 SQ. FT.
10.000	2.000	.000	.000	LREF 474.8000 INCHES
10.000	2.000	-14.250	.000	BREF 936.6800 INCHES
.000	2.000	.000	.000	XMRP 1076.7000 IN. X0
				YMRP .0000 IN. Y0
				ZMRP 375.0000 IN. Z0
				SCALE .0100

RCS JET AMPLIFICATION FACTOR - AXIAL FORCE, N(AF)

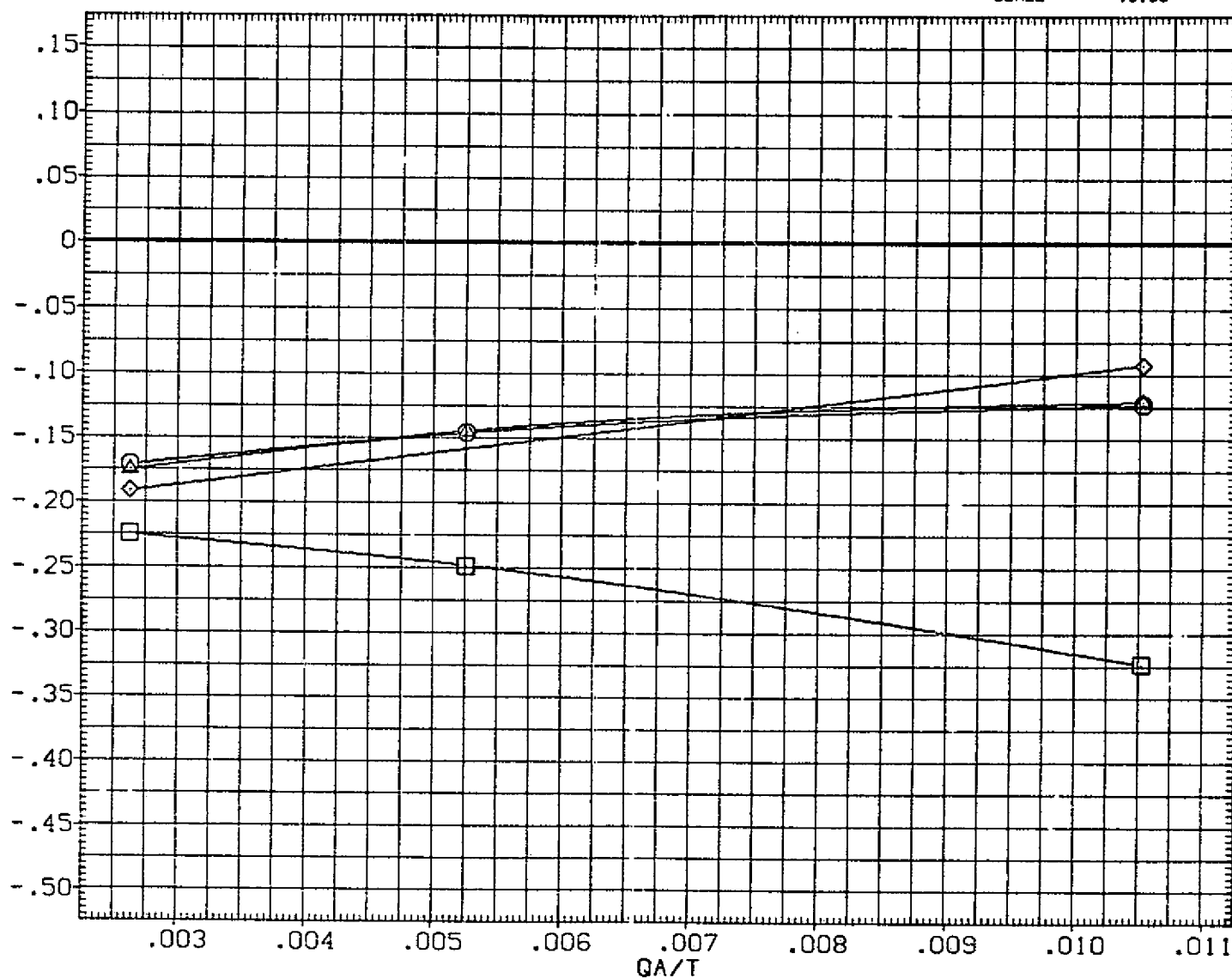


FIGURE 81. EFFECT OF ELEVON/BODY FLAP ON AMPLIFICATION FACTOR, JETS N79N78
(A) ALPHA = -8.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA020)	01N79N78 LARC CFHT 118 (MA-22)
(SJA027)	01N79N78 LARC CFHT 118 (MA-22)
(SJA048)	01N79N78 LARC CFHT 118 (MA-22)
(XJA009)	01N79N78 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BDFLAP	BETA	REFERENCE INFORMATION		
.000	2.000	-14.250	.000	SREF	2690.0000	50. FT.
10.000	2.000	.000	.000	LREF	474.8000	INCHES
10.000	2.000	-14.250	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.0100	

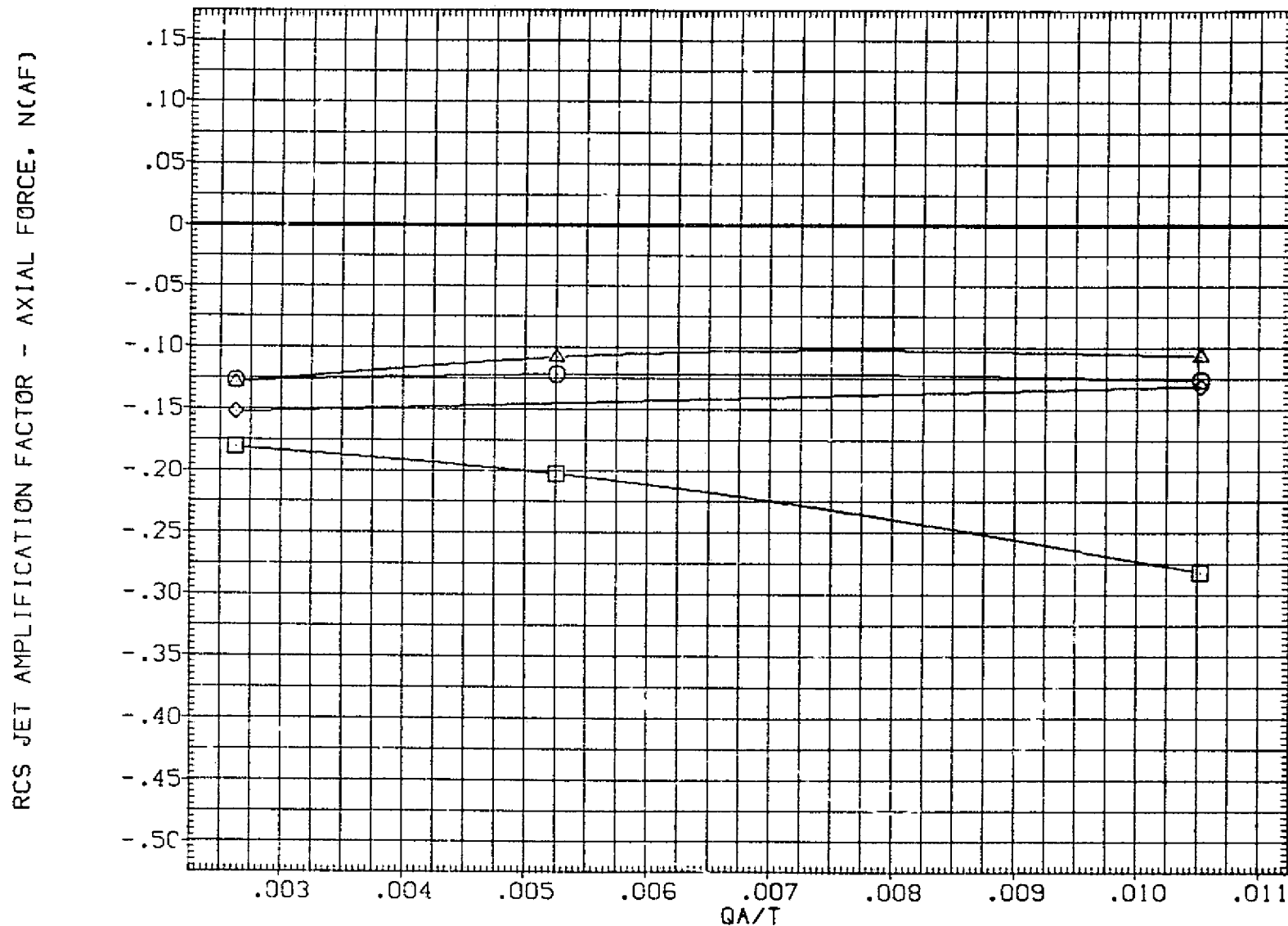


FIGURE 81. EFFECT OF ELEVON/BODY FLAP ON AMPLIFICATION FACTOR, JETS N79N78

(B) ALPHA = .00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
[SJA020]	01N79N78 LARC CFHT 118 (MA-22)
[SJA027]	01N79N78 LARC CFHT 118 (MA-22)
[SJA048]	01N79N78 LARC CFHT 118 (MA-22)
[XJA009]	01N79N78 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BD FLAP	BETA	REFERENCE INFORMATION		
.000	2.000	-14.250	.000	SREF	2690.0000	50. FT.
10.000	2.000	.000	.000	LREF	474.8000	INCHES
10.000	2.000	-14.250	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - AXIAL FORCE, N(AF)

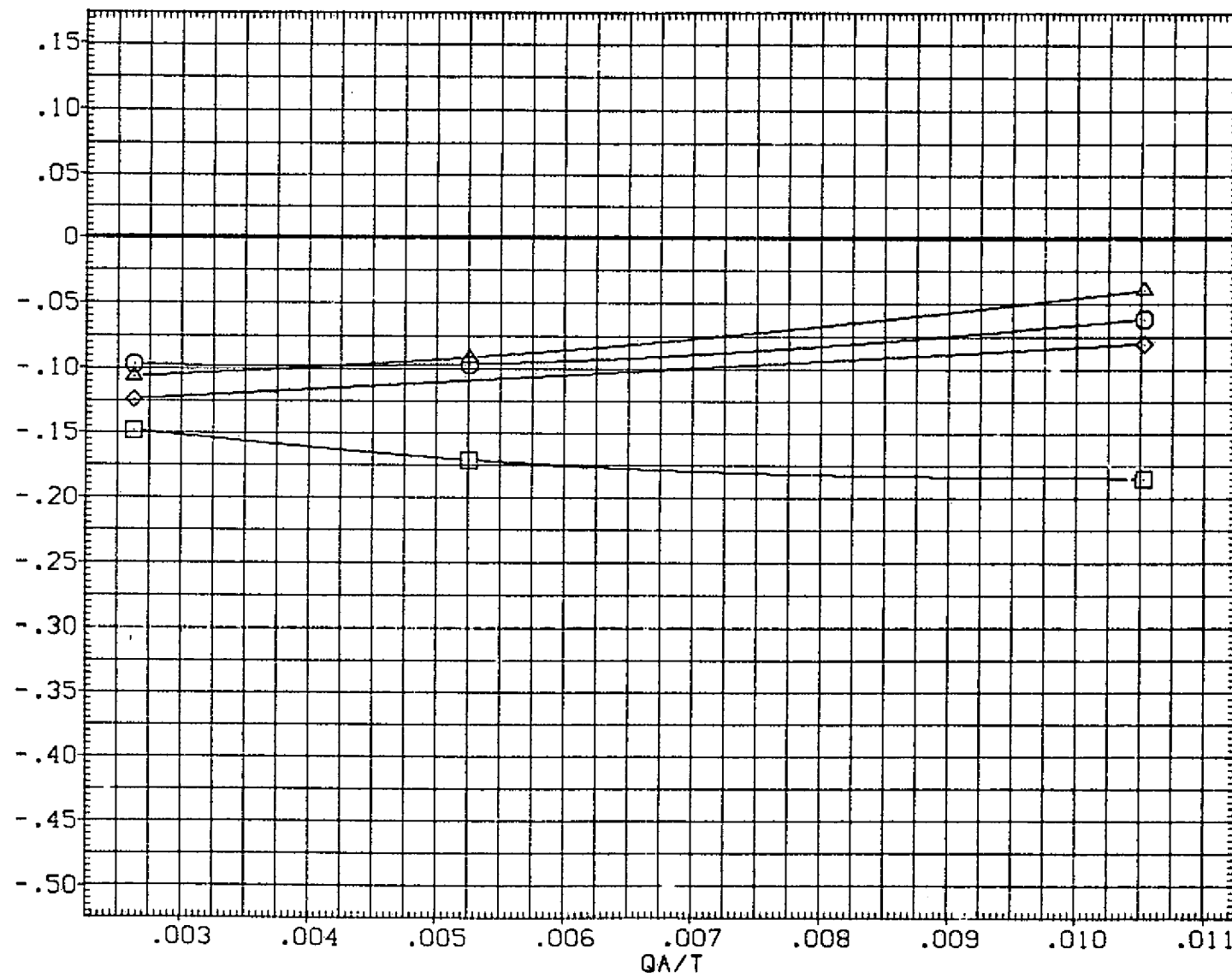


FIGURE 81. EFFECT OF ELEVON/BODY FLAP ON AMPLIFICATION FACTOR, JETS N79N78

(C) ALPHA = 10.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA020)	□ 01N79N78 LARC CFHT 118 (MA-22)
(SJA027)	□ 01N79N78 LARC CFHT 118 (MA-22)
(SJA048)	◇ 01N79N78 LARC CFHT 118 (MA-22)
(XJA009)	△ 01N79N78 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BD FLAP	BETA	REFERENCE INFORMATION		
.000	2.000	-14.250	.000	SREF	2690.0000	SQ. FT.
.000	2.000	.000	.000	LREF	474.8000	INCHES
10.000	2.000	-14.250	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.0100	

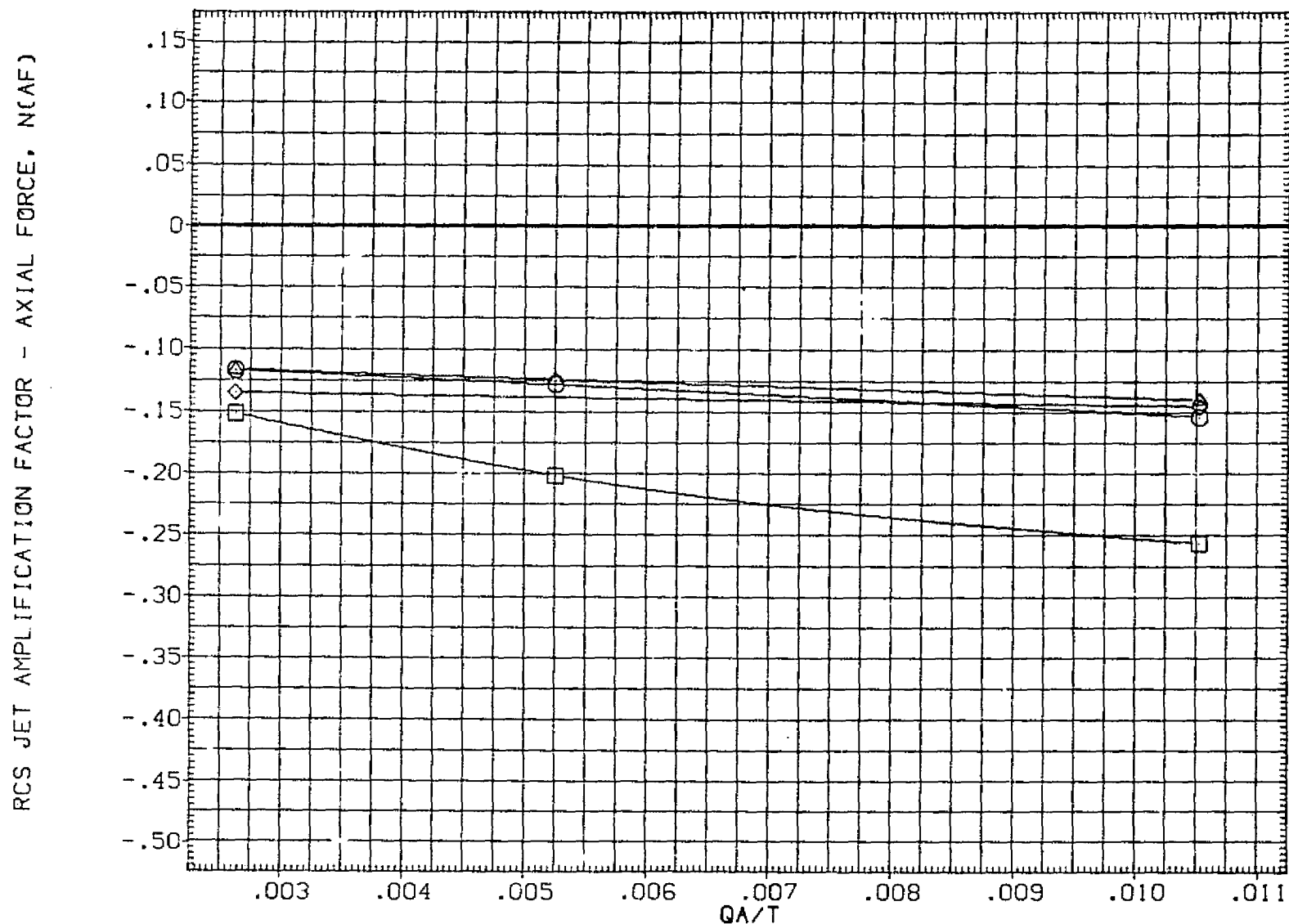


FIGURE 81. EFFECT OF ELEVON/BODY FLAP ON AMPLIFICATION FACTOR, JETS N79N78

(D) ALPHA = 20.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA020)	01N79N78 LARC CFHT 118 (MA-22)
(SJA027)	01N79N78 LARC CFHT 118 (MA-22)
(SJA048)	01N79N78 LARC CFHT 118 (MA-22)
(XJA009)	01N79N78 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BOFLAP	BETA	REFERENCE INFORMATION		
.000	2.000	-14.250	.000	SREF	2690.0000	SQ. FT.
10.000	2.000	.000	.000	LREF	474.8000	INCHES
10.000	2.000	-14.250	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - AXIAL FORCE, N(AF)

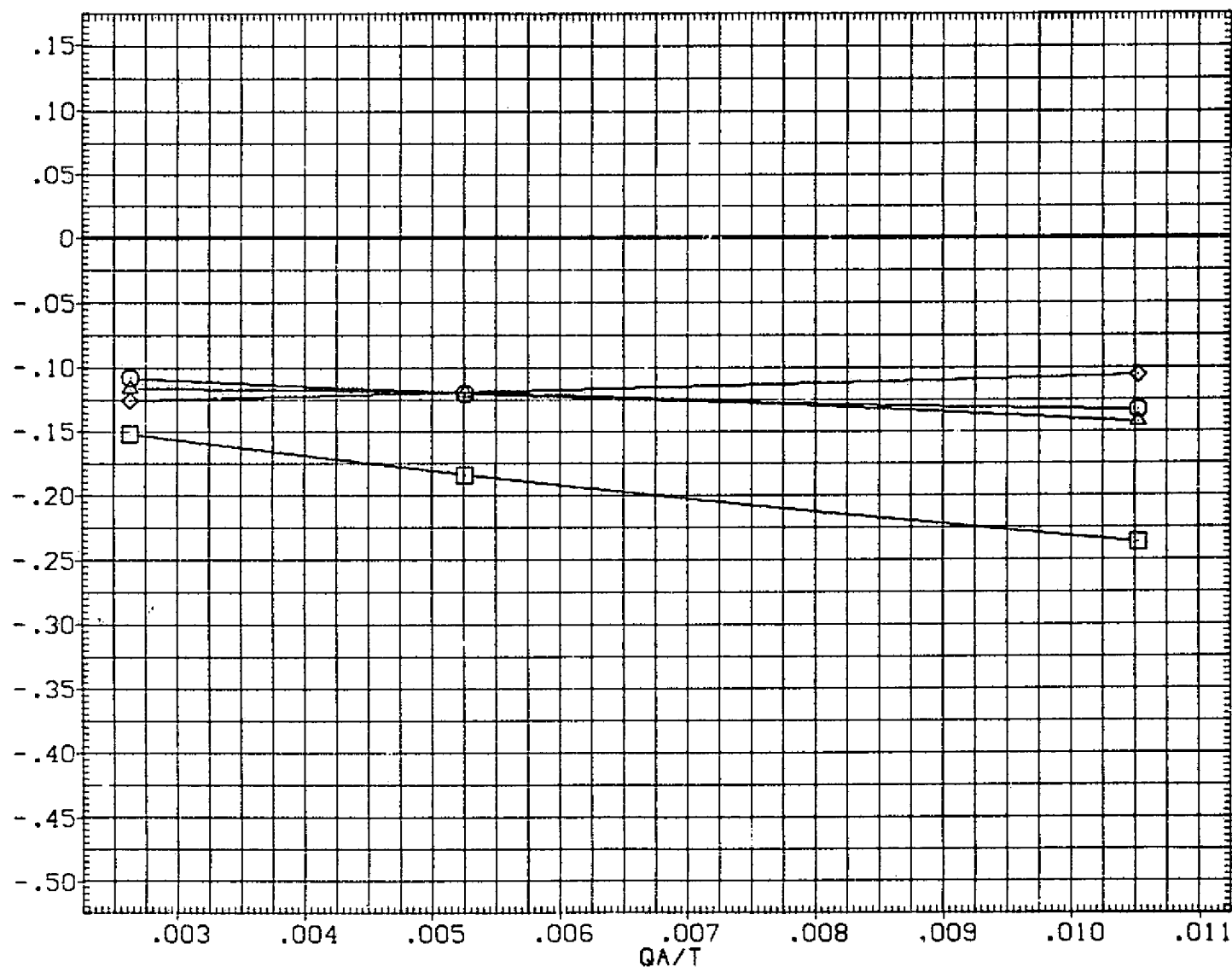


FIGURE 81. EFFECT OF ELEVON/BODY FLAP ON AMPLIFICATION FACTOR, JETS N79N78
(E) ALPHA = 35.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA020)	01N79N78 LARC CFHT 118 (MA-22)
(SJA027)	01N79N78 LARC CFHT 118 (MA-22)
(SJA048)	01N79N78 LARC CFHT 118 (MA-22)
(XJA009)	01N79N78 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BD FLAP	BETA	REFERENCE INFORMATION		
.000	2.000	-14.250	.000	SREF	2690.0000	SQ. FT.
10.000	2.000	.000	.000	LREF	474.8000	INCHES
10.000	2.000	-14.250	.000	BREF	936.6600	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - ROLL, N(RM)

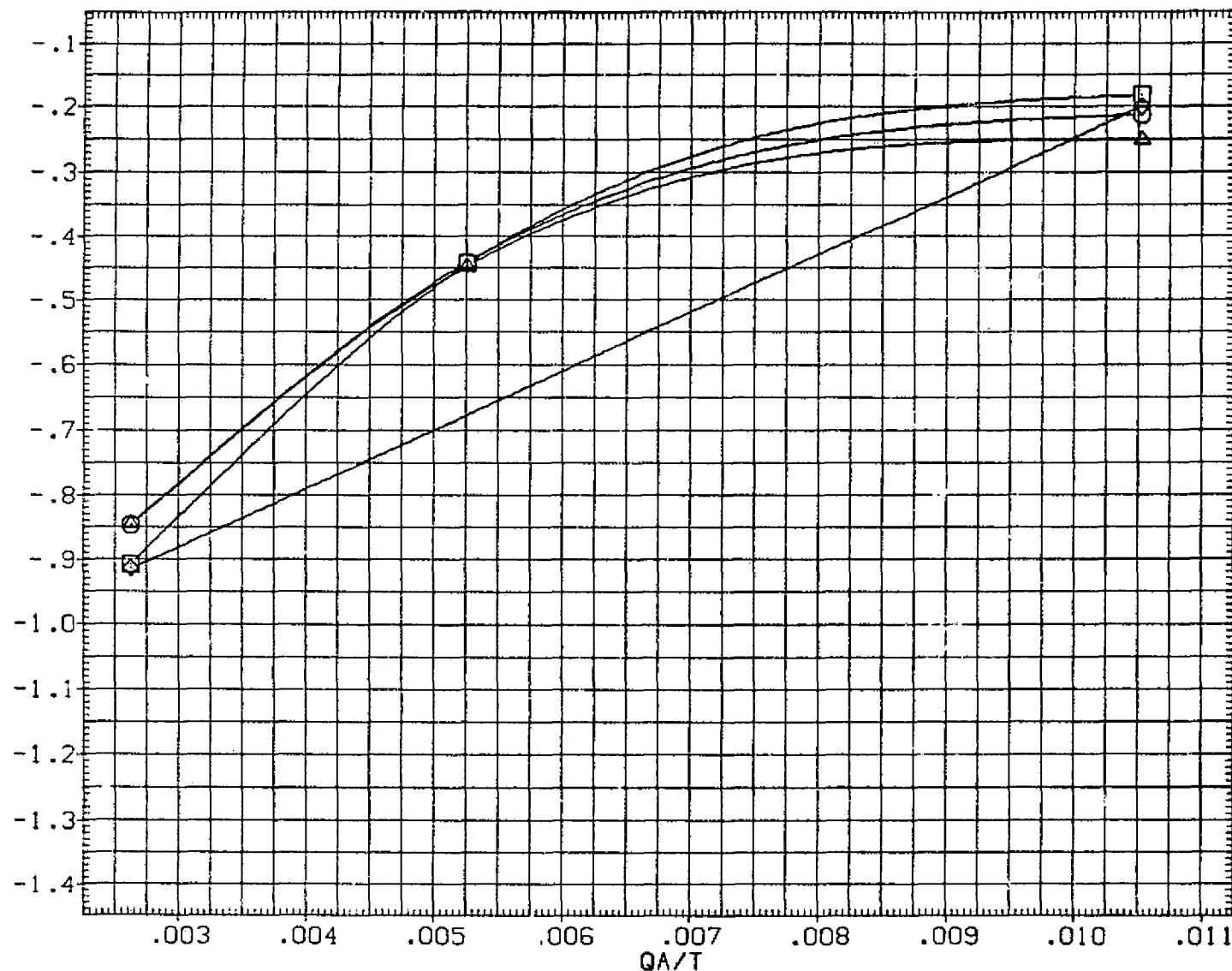


FIGURE 81. EFFECT OF ELEVON/BODY FLAP ON AMPLIFICATION FACTOR, JETS N79N78

(A) ALPHA = -8.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA020)	01N79N78 LARC CFHT 118 (MA-22)
(SJA027)	01N79N78 LARC CFHT 118 (MA-22)
(SJA048)	01N79N78 LARC CFHT 118 (MA-22)
(XJA009)	01N79N78 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BOFLAP	BETA	REFERENCE INFORMATION		
.000	2.000	-14.250	.000	SREF	2690.0000	SQ. FT.
10.000	2.000	.000	.000	LREF	474.8000	INCHES
10.000	2.000	-14.250	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - ROLL, NCRM

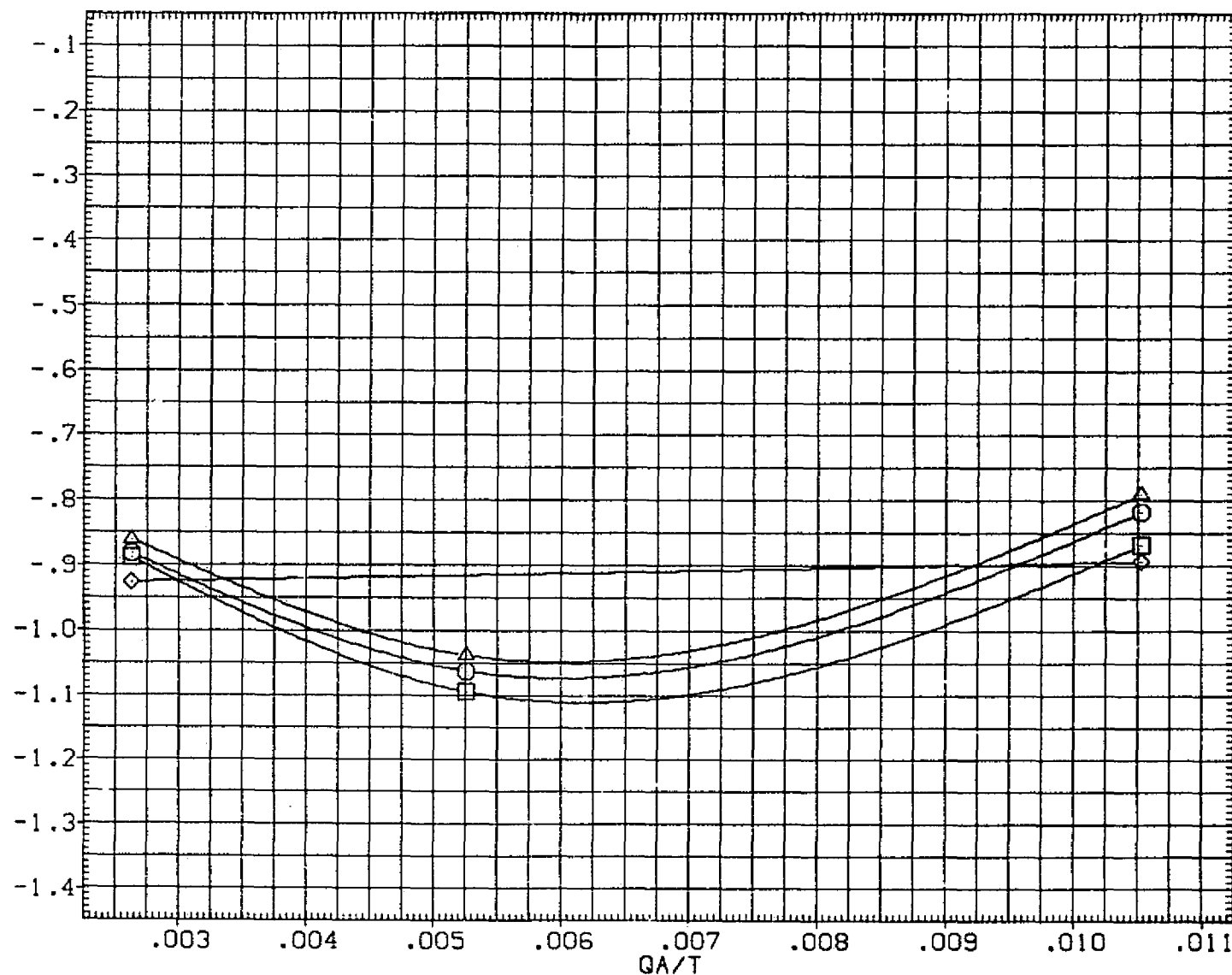


FIGURE 81. EFFECT OF ELEVON/BODY FLAP ON AMPLIFICATION FACTOR, JETS N79N78

(B) ALPHA = .00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA020)	01N79N78 LARC CFHT 118 (MA-22)
(SJA027)	01N79N78 LARC CFHT 118 (MA-22)
(SJA048)	01N79N78 LARC CFHT 118 (MA-22)
(XJA009)	01N79N78 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BD FLAP	BETA	REFERENCE INFORMATION		
.000	2.000	-14.250	.000	SREF	2690.0000	SQ. FT.
10.000	2.000	.000	.000	LREF	474.8000	INCHES
10.000	2.000	-14.250	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.0100	

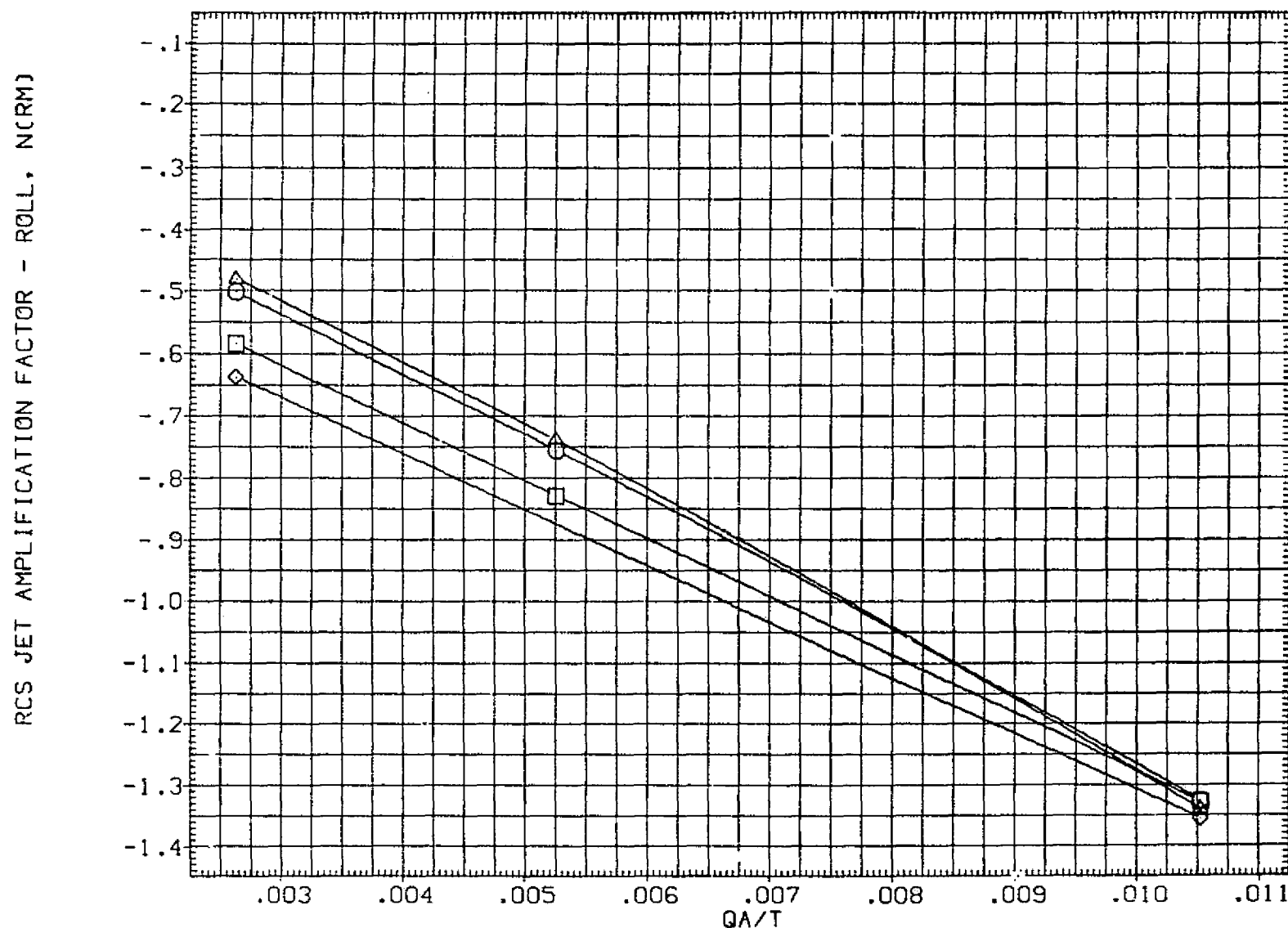


FIGURE 81. EFFECT OF ELEVON/BODY FLAP ON AMPLIFICATION FACTOR, JETS N79N78

(C) ALPHA = 10.00

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION
(SJA020)	○	01N79N78 LARC CFHT 118 (MA-22)
(SJA027)	□	01N79N78 LARC CFHT 118 (MA-22)
(SJA048)	◇	01N79N78 LARC CFHT 118 (MA-22)
(XJA009)	△	01N79N78 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BDFLAP	BETA	REFERENCE INFORMATION		
.000	2.000	-14.250	.000	SREF	2690.0000	50. FT.
10.000	2.000	.000	.000	LREF	474.8000	INCHES
10.000	2.000	-14.250	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - ROLL, N(RM)

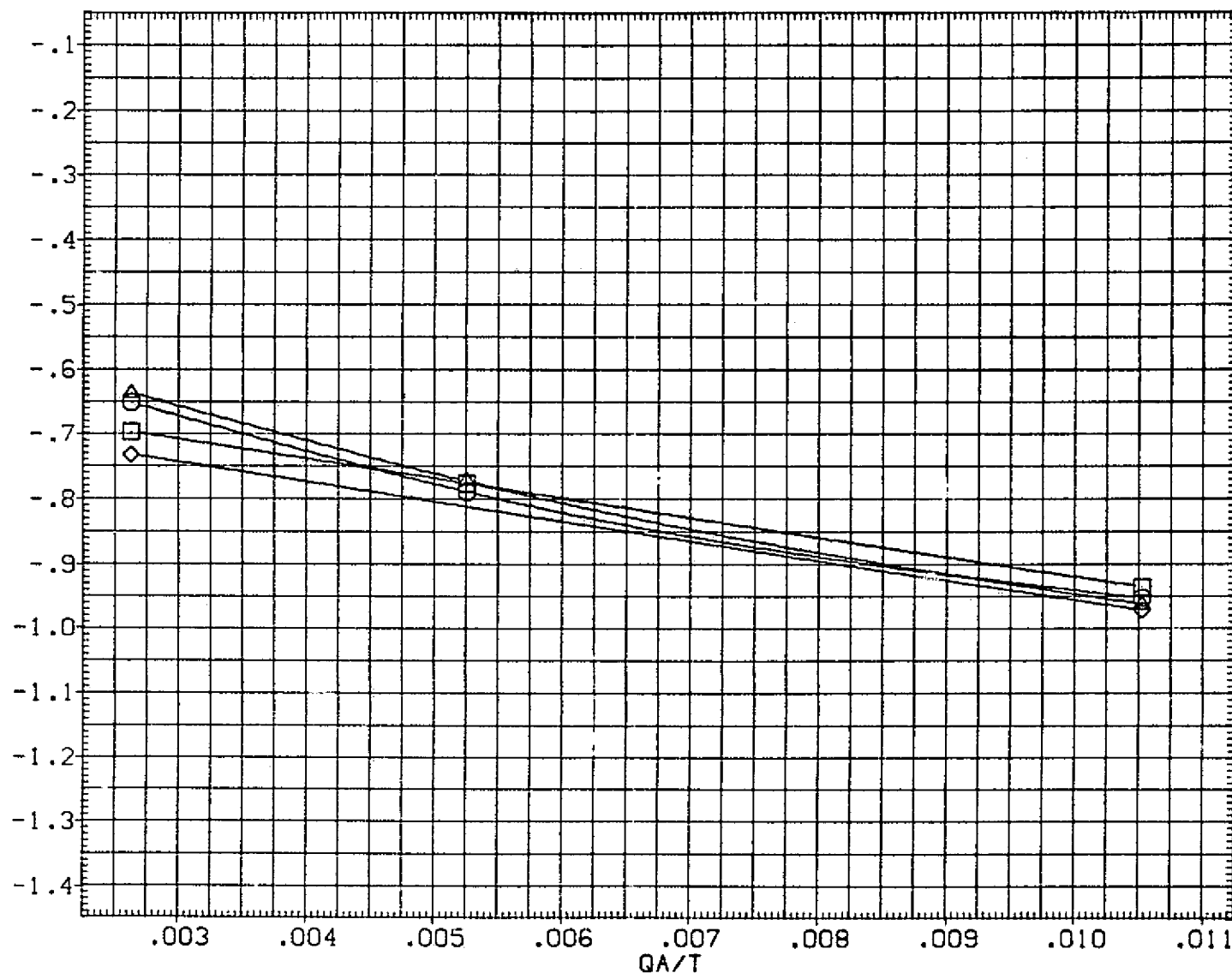


FIGURE 81. EFFECT OF ELEVON/BODY FLAP ON AMPLIFICATION FACTOR, JETS N79N78

(D) ALPHA = 20.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA020)	01N79N78 LARC CFHT 118 (MA-22)
(SJA027)	01N79N78 LARC CFHT 118 (MA-22)
(SJA048)	01N79N78 LARC CFHT 118 (MA-22)
(XJA009)	01N79N78 LARC CFHT 118 (MA-22)

ELEVON	NO.JET	BDFLAP	BETA	REFERENCE INFORMATION		
.000	2.000	-14.250	.000	SREF	2690.0000	SQ.FT.
10.000	2.000	.000	.000	LREF	474.8000	INCHES
10.000	2.000	-14.250	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.0100	

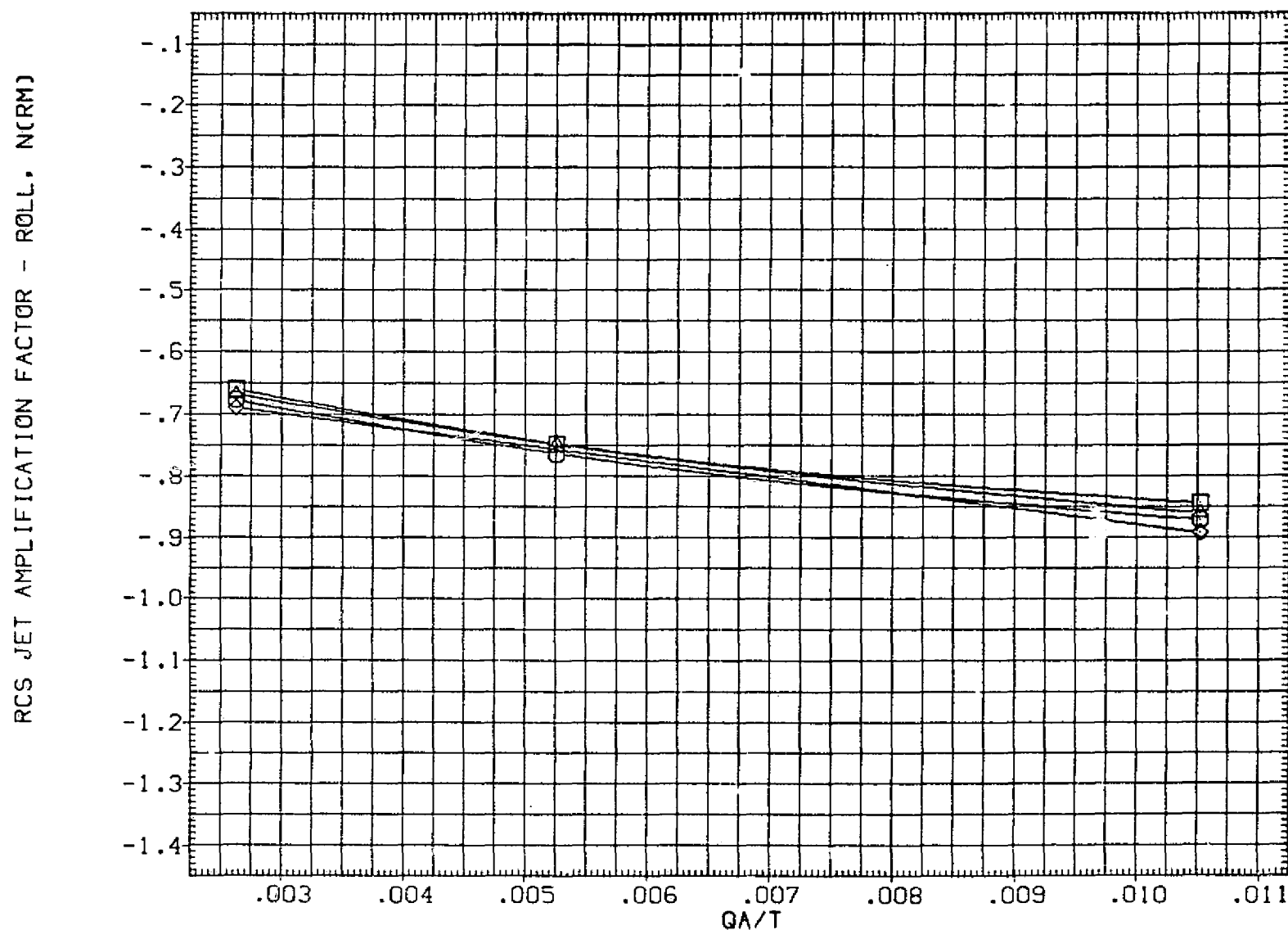


FIGURE 81. EFFECT OF ELEVON/BODY FLAP ON AMPLIFICATION FACTOR, JETS N79N78
(E) ALPHA = 35.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA020)	01N79N78 LARC CFHT 118 (MA-22)
(SJA027)	01N79N78 LARC CFHT 118 (MA-22)
(SJA048)	01N79N78 LARC CFHT 118 (MA-22)
(XJA009)	01N79N78 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BD FLAP	BETA	REFERENCE INFORMATION		
.000	2.000	-14.250	.000	SREF	2690.0000	SQ. FT.
10.000	2.000	.000	.000	LREF	474.8000	INCHES
10.000	2.000	-14.250	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - YAW, N(YM)

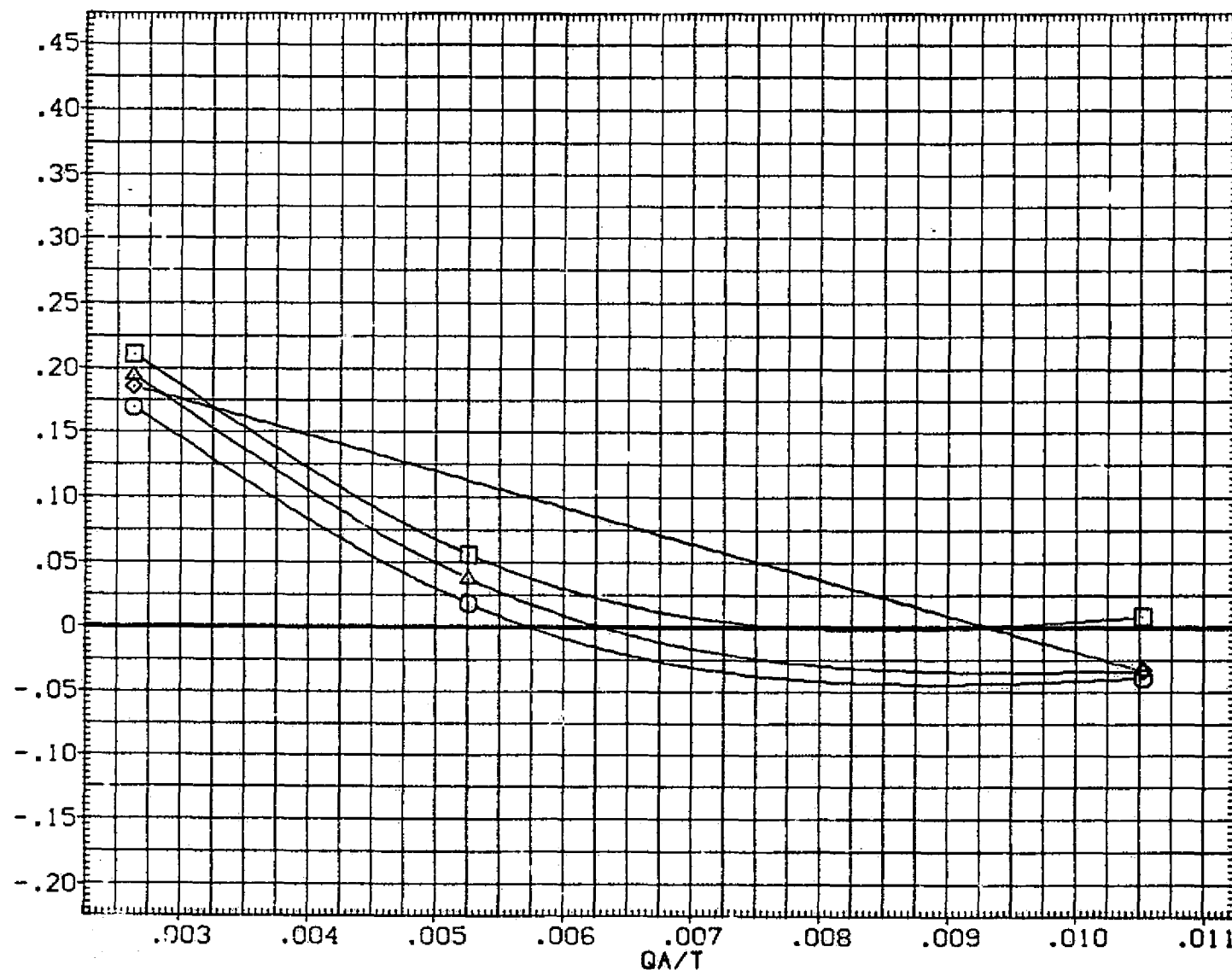


FIGURE 81. EFFECT OF ELEVON/BODY FLAP ON AMPLIFICATION FACTOR, JETS N79N78

(A) ALPHA = -8.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA020)	01N79N78 LARC CFHT 118 (MA-22)
(SJA027)	01N79N78 LARC CFHT 118 (MA-22)
(SJA048)	01N79N78 LARC CFHT 118 (MA-22)
(XJA009)	01N79N78 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BD FLAP	BETA	REFERENCE INFORMATION
.000	2.000	-14.250	.000	SREF 2690.0000 SQ. FT.
10.000	2.000	.000	.000	LREF 474.8000 INCHES
10.000	2.000	-14.250	.000	BREF 936.6800 INCHES
.000	2.000	.000	.000	XMRP 1076.7000 IN. X0
				YMRP .0000 IN. Y0
				ZMRP 375.0000 IN. Z0
				SCALE .0100

RCS JET AMPLIFICATION FACTOR - YAW, N(YM)

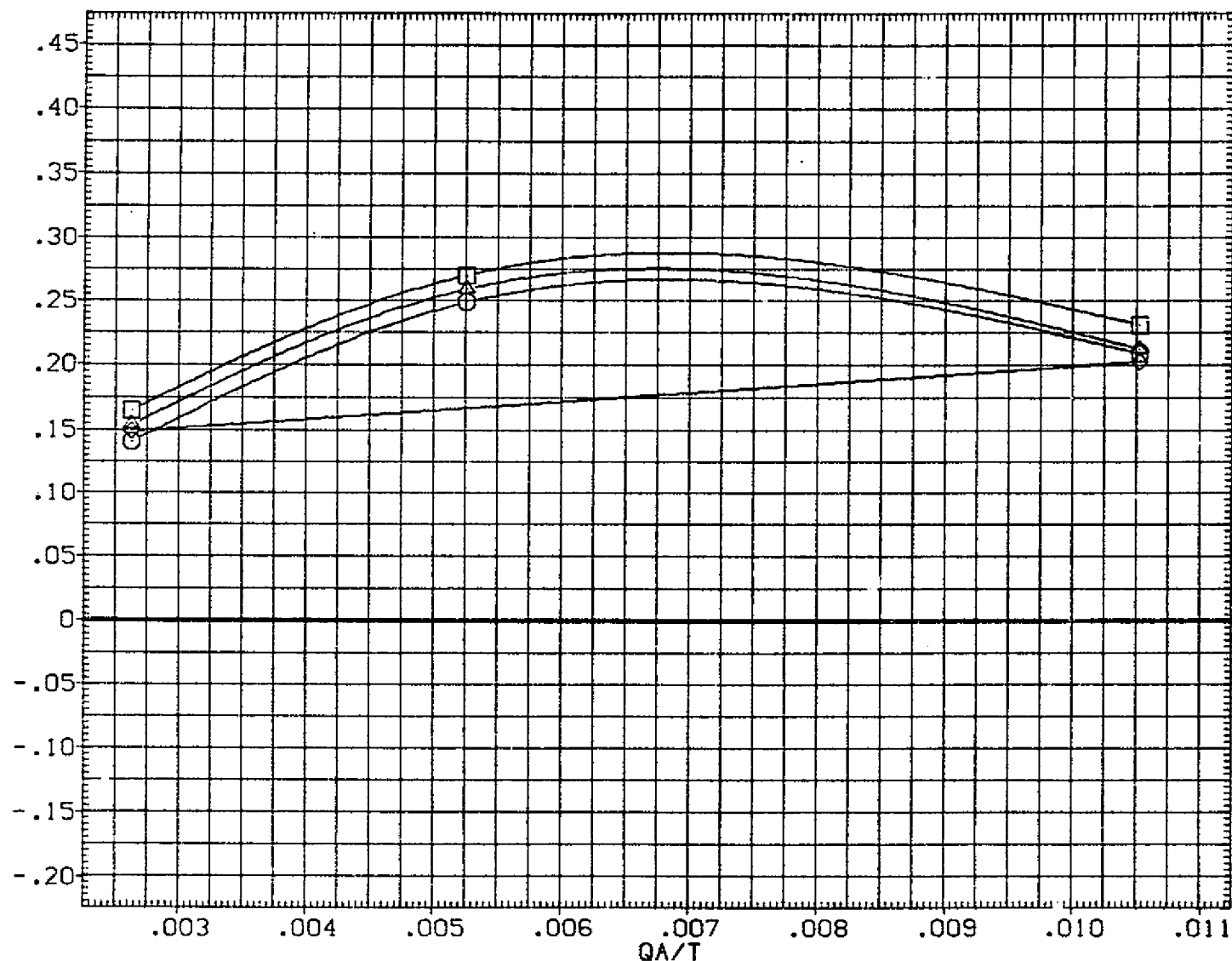


FIGURE 81. EFFECT OF ELEVON/BODY FLAP ON AMPLIFICATION FACTOR, JETS N79N78

(B) ALPHA = .00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA020)	01N79N78 LARC CFHT 118 (MA-22)
(SJA027)	01N79N78 LARC CFHT 118 (MA-22)
(SJA048)	01N79N78 LARC CFHT 118 (MA-22)
(XJA009)	01N79N78 LARC CFHT 118 (MA-22)

ELEVON	NO.JET	BDFLAP	BETA	REFERENCE INFORMATION		
.000	2.000	-14.250	.000	SREF	2690.0000	SQ.FT.
10.000	2.000	.000	.000	LREF	474.8000	INCHES
10.000	2.000	-14.250	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - YAW, N(YM)

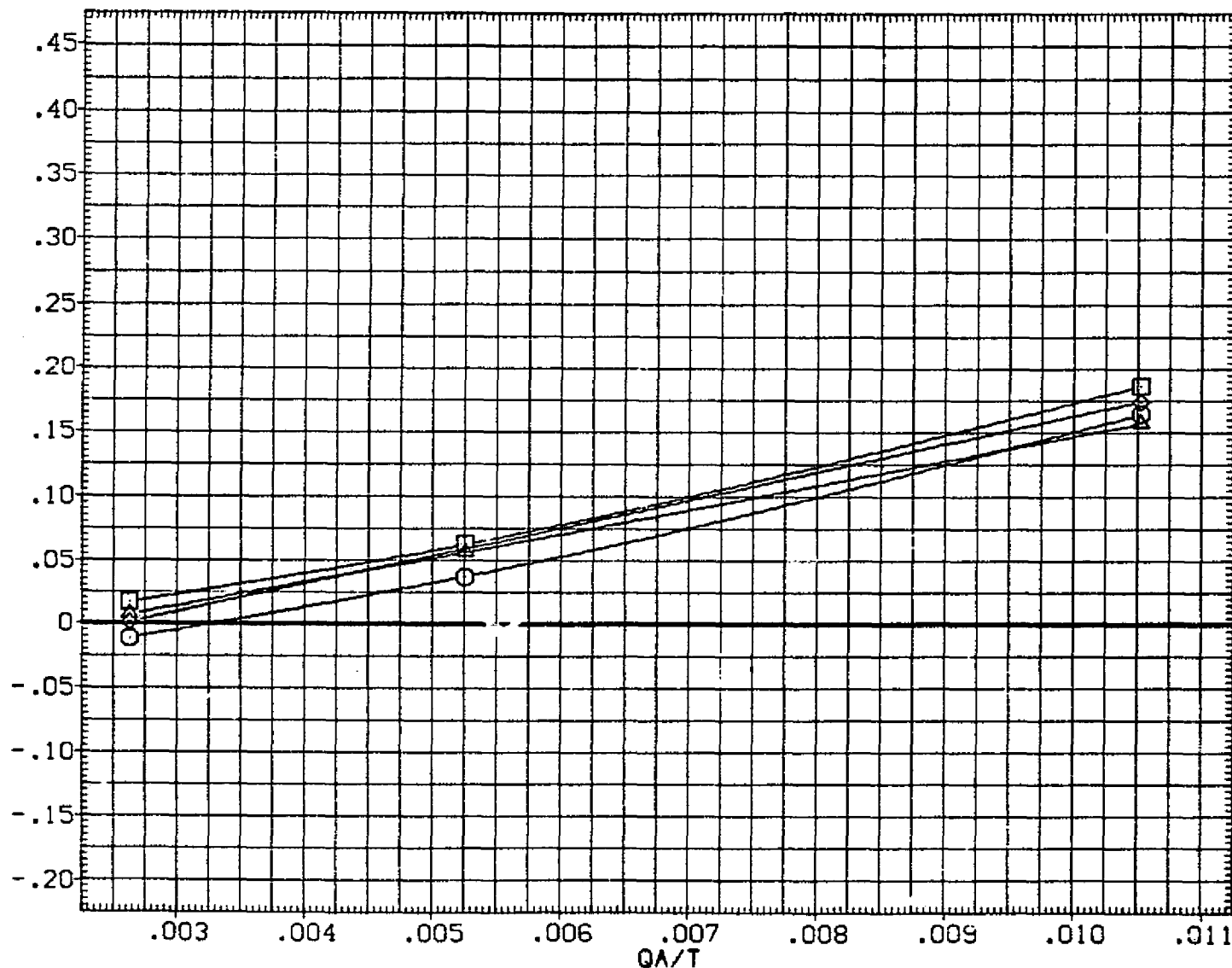


FIGURE 81. EFFECT OF ELEVON/BODY FLAP ON AMPLIFICATION FACTOR, JETS N79N78

(C) ALPHA = 10.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
[SJA020]	01N79N78 LARC CFHT 118 (MA-22)
[SJA027]	01N79N78 LARC CFHT 118 (MA-22)
[SJA048]	01N79N78 LARC CFHT 118 (MA-22)
[XJA009]	01N79N78 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BD FLAP	BETA	REFERENCE INFORMATION		
.000	2.000	-14.250	.000	SREF	2690.0000	50. FT.
10.000	2.000	.000	.000	LREF	474.8000	INCHES
10.000	2.000	-14.250	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - YAW, NCM)

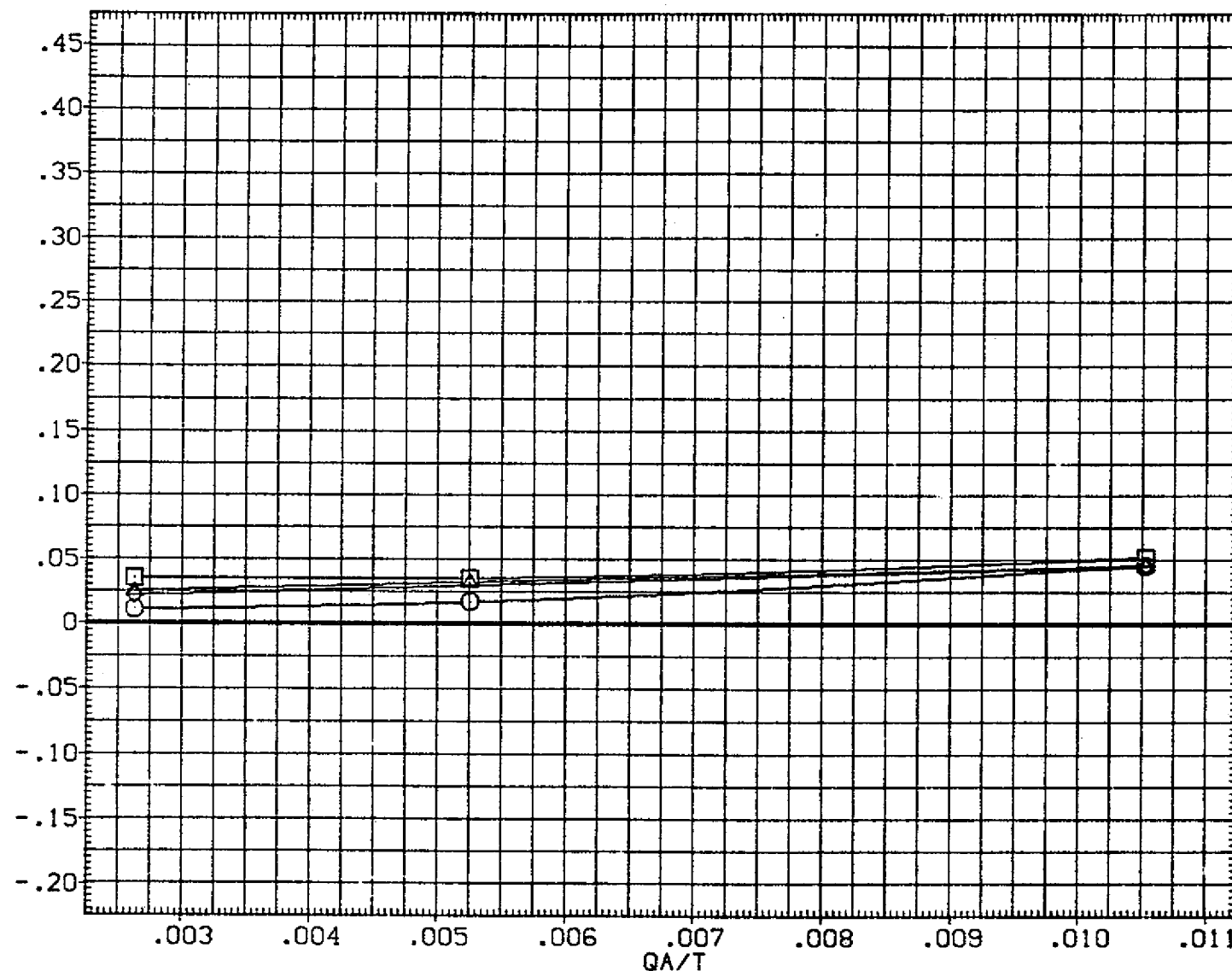


FIGURE 81. EFFECT OF ELEVON/BODY FLAP ON AMPLIFICATION FACTOR, JETS N79N78

(D) ALPHA = 20.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA020)	01N79N78 LARC CFHT 118 (MA-22)
(SJA027)	01N79N78 LARC CFHT 118 (MA-22)
(SJA048)	01N79N78 LARC CFHT 118 (MA-22)
(XJA009)	01N79N78 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BD FLAP	BETA	REFERENCE INFORMATION		
.000	2.000	-14.250	.000	SREF	2690.0000	50. FT.
10.000	2.000	.000	.000	LREF	474.8000	INCHES
10.000	2.000	-14.250	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - YAW, N(YM)

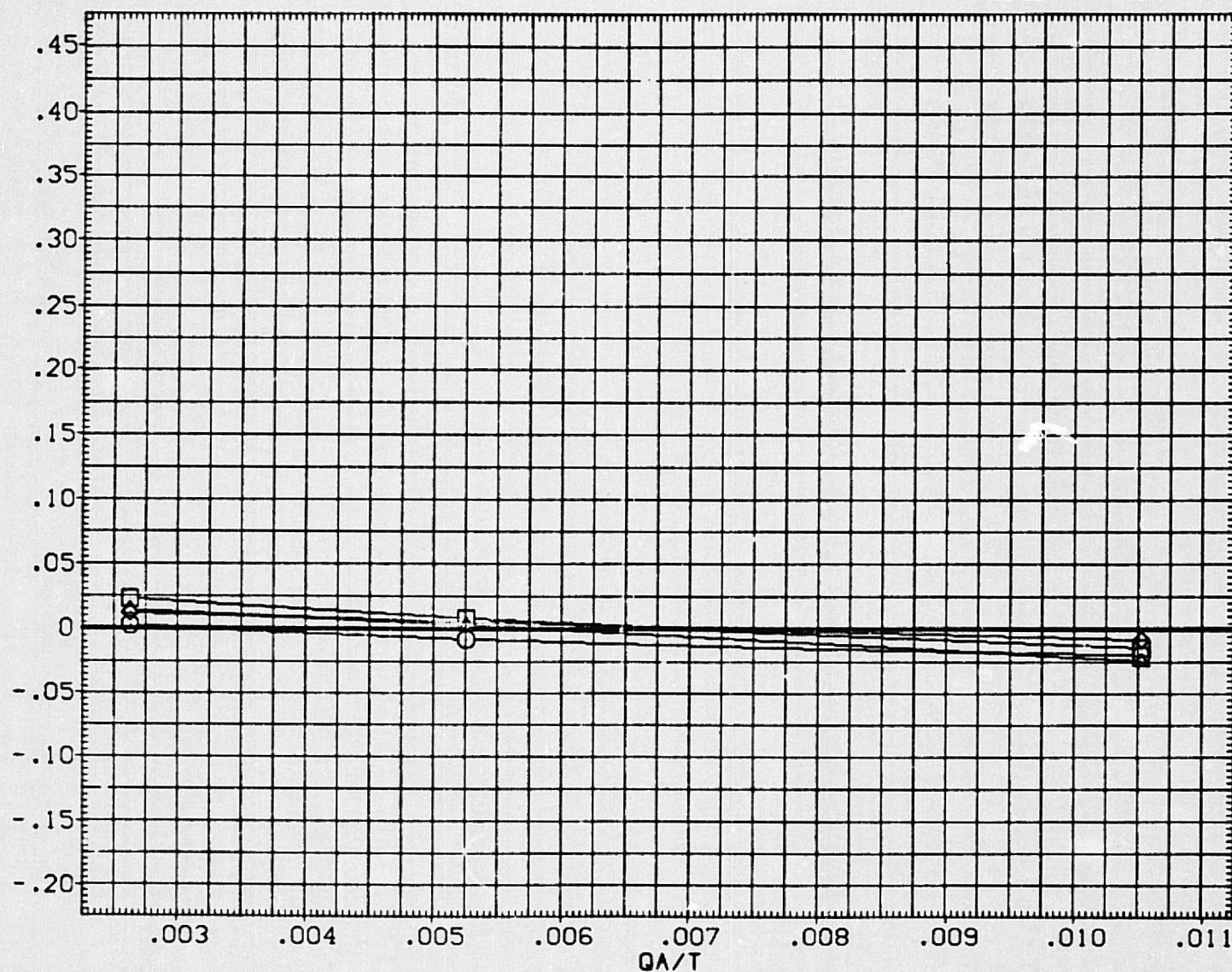


FIGURE 81. EFFECT OF ELEVON/BODY FLAP ON AMPLIFICATION FACTOR, JETS N79N78
(E) ALPHA = 35.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA020)	□ 01N79N78 LARC CFHT 118 (MA-22)
(SJA027)	○ 01N79N78 LARC CFHT 118 (MA-22)
(SJA048)	◇ 01N79N78 LARC CFHT 118 (MA-22)
(XJA009)	△ 01N79N78 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BOFLAP	BETA	REFERENCE INFORMATION		
.000	2.000	-14.250	.000	SREF	2690.0000	SQ. FT.
10.000	2.000	.000	.000	LREF	474.8000	INCHES
10.000	2.000	-14.250	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - SIDE FORCE, N(SF)

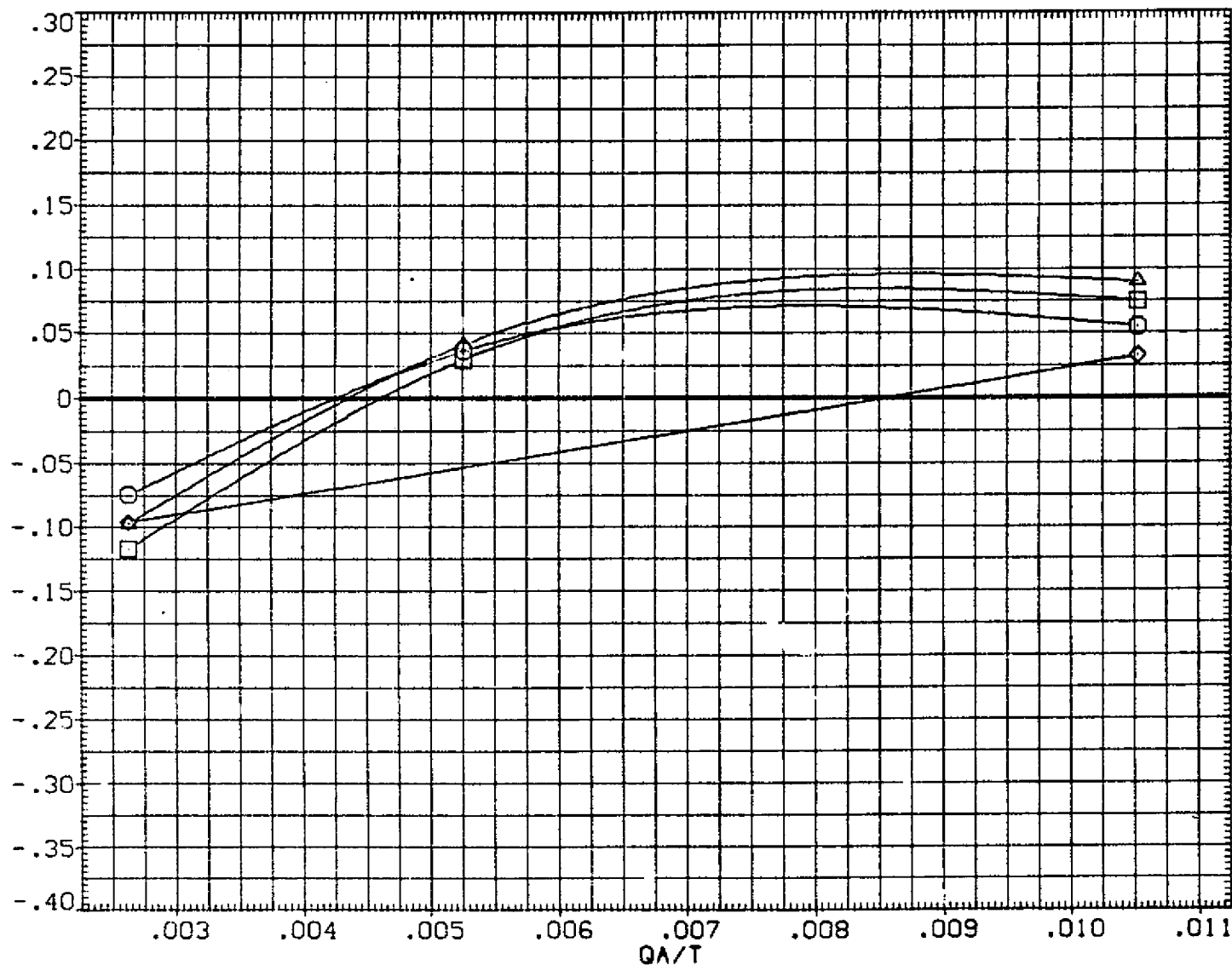


FIGURE 81. EFFECT OF ELEVON/BODY FLAP ON AMPLIFICATION FACTOR, JETS N79N78
(A) ALPHA = -8.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA020)	01N79N78 LARC CFHT 118 (MA-22)
(SJA027)	01N79N78 LARC CFHT 118 (MA-22)
(SJA048)	01N79N78 LARC CFHT 118 (MA-22)
(XJA009)	01N79N78 LARC CFHT 118 (MA-22)

ELEVON	NO.JET	BDFLAP	BETA	REFERENCE INFORMATION		
.000	2.000	-14.250	.000	SREF	2690.0000	50.FT.
10.000	2.000	.000	.000	LREF	474.8000	INCHES
10.000	2.000	-14.250	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - SIDE FORCE, N(SF)

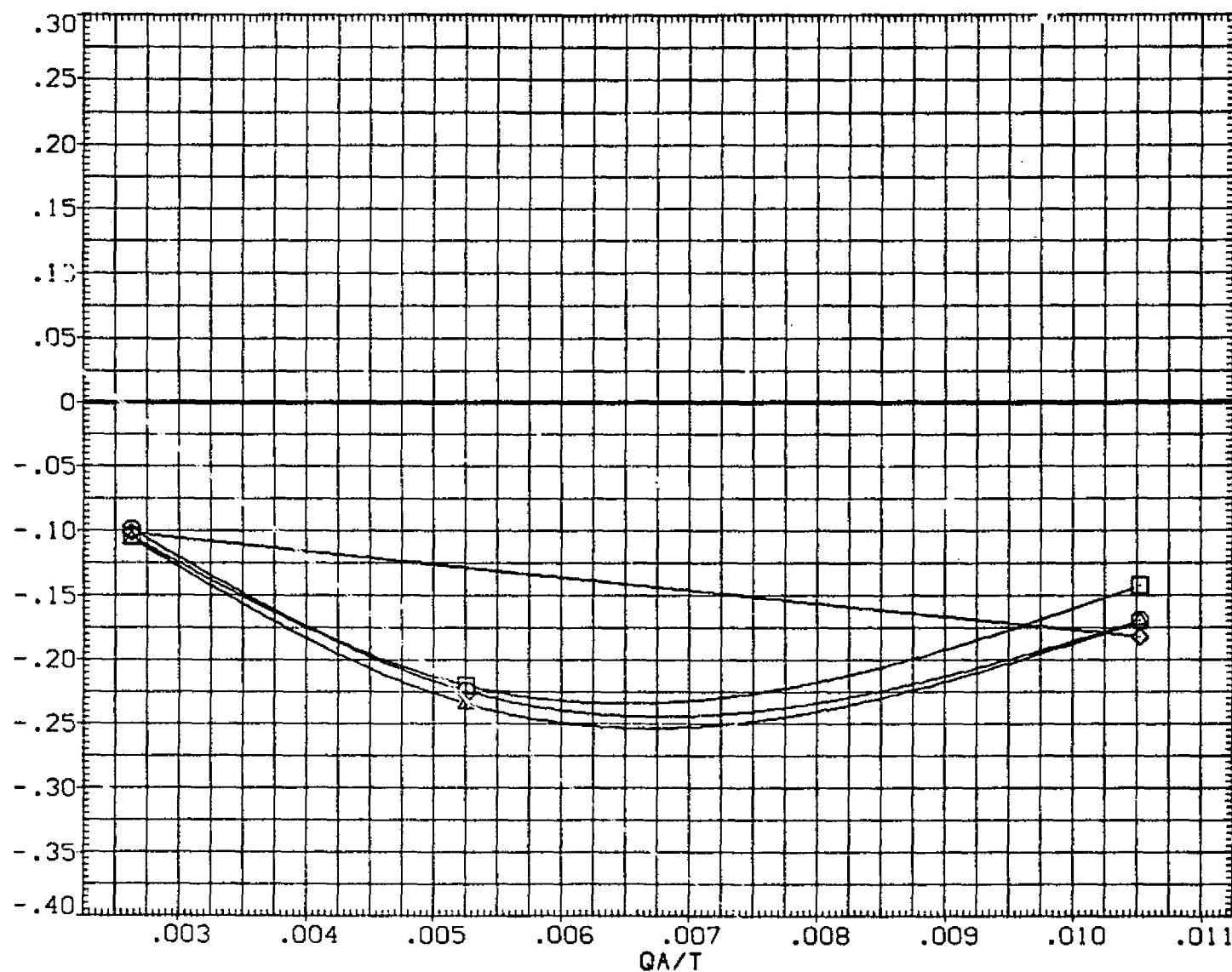


FIGURE 81. EFFECT OF ELEVON/BODY FLAP ON AMPLIFICATION FACTOR, JETS N79N78

(B) ALPHA = .00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA020)	01N79N78 LARC CFHT 118 (MA-22)
(SJA027)	01N79N78 LARC CFHT 118 (MA-22)
(SJA048)	01N79N78 LARC CFHT 118 (MA-22)
(XJA009)	01N79N78 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BDFLAP	BETA	REFERENCE INFORMATION		
.000	2.000	-14.250	.000	SREF	2690.0000	50. FT.
10.000	2.000	.000	.000	LREF	474.8000	INCHES
10.000	2.000	-14.250	.000	BREF	936.8800	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.0100	

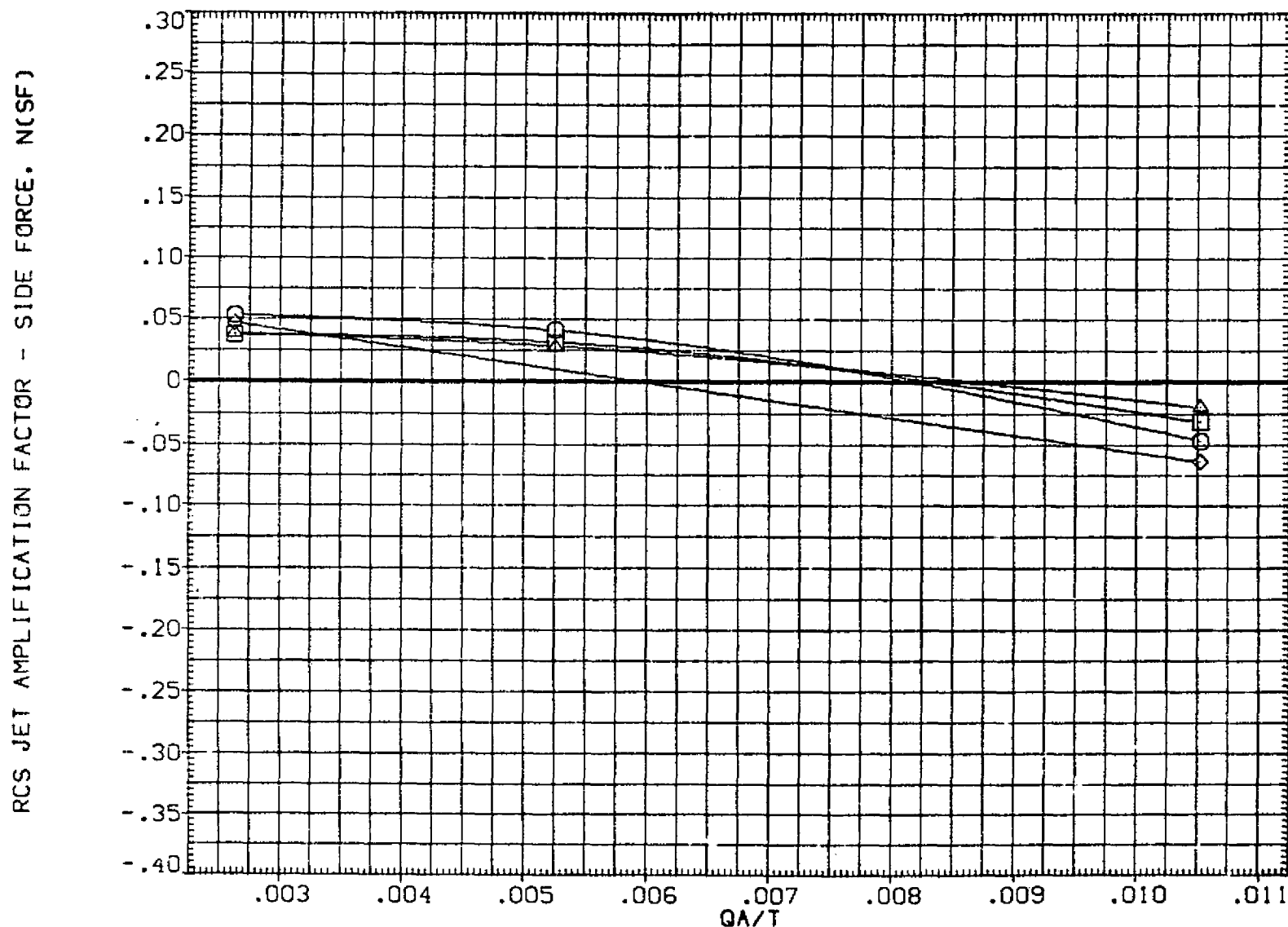


FIGURE 81. EFFECT OF ELEVON/BODY FLAP ON AMPLIFICATION FACTOR, JETS N79N78

(C) ALPHA = 10.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA020)	01N79N78 LARC CFHT 118 (MA-22)
(SJA027)	01N79N78 LARC CFHT 118 (MA-22)
(SJA048)	01N79N78 LARC CFHT 118 (MA-22)
(XJA009)	01N79N78 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BD FLAP	BETA	REFERENCE INFORMATION		
.000	2.000	-14.250	.000	SREF	2690.0000	SQ. FT.
10.000	2.000	.000	.000	LREF	474.8000	INCHES
10.000	2.000	-14.250	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - SIDE FORCE, N(SF)

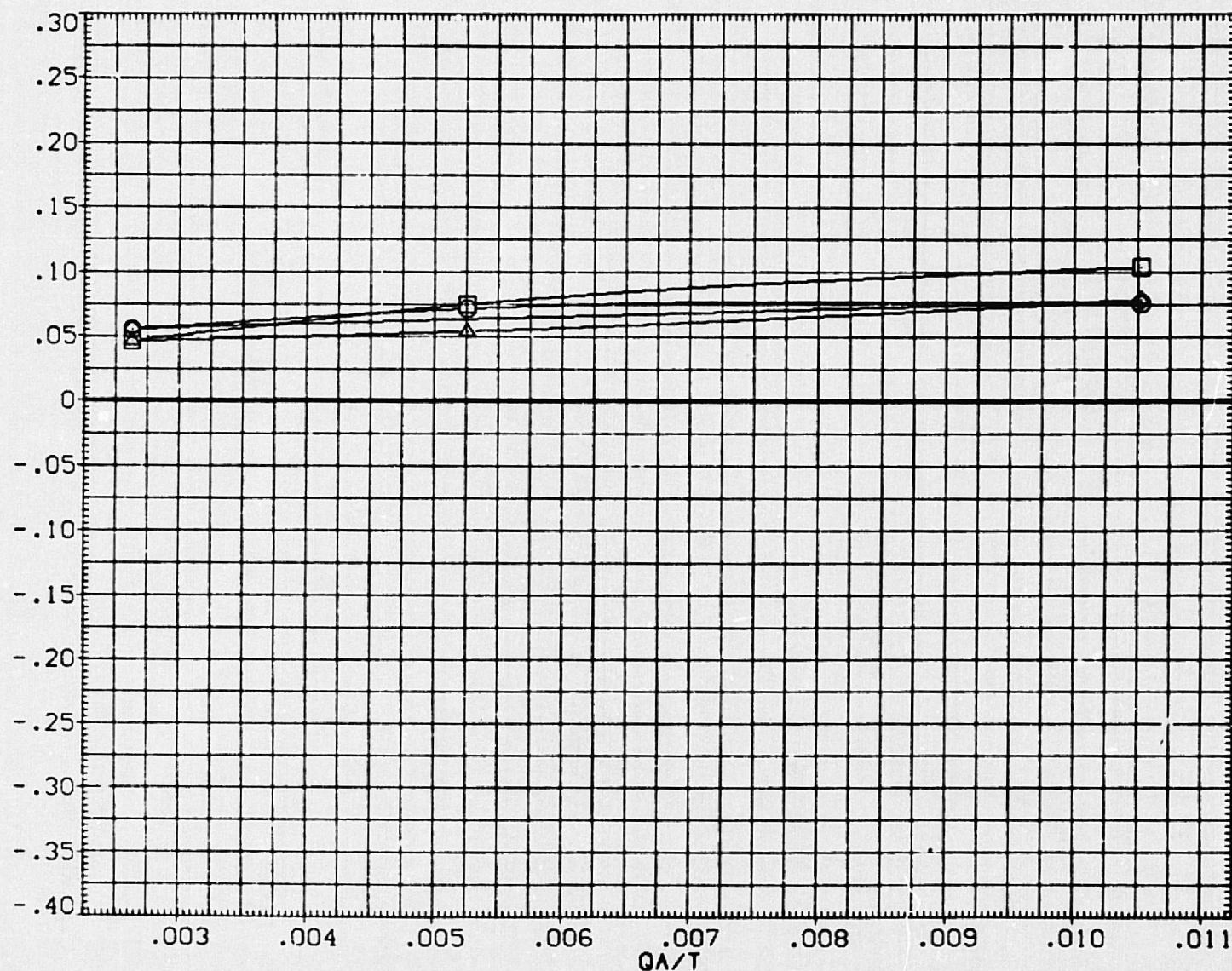


FIGURE 81. EFFECT OF ELEVON/BODY FLAP ON AMPLIFICATION FACTOR, JETS N79N78

(D) ALPHA = 20.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA020)	01N79N78 LARC CFHT 118 (MA-22)
(SJA027)	01N79N78 LARC CFHT 118 (MA-22)
(SJA048)	01N79N78 LARC CFHT 118 (MA-22)
(XJA009)	01N79N78 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BD FLAP	BETA	REFERENCE INFORMATION	
.000	2.000	-14.250	.000	SREF	2690.0000 SQ. FT.
10.000	2.000	.000	.000	LREF	474.8000 INCHES
10.000	2.000	-14.250	.000	BREF	936.6800 INCHES
.000	2.000	.000	.000	XMRP	1076.7000 IN. X0
				YMRP	.0000 IN. Y0
				ZMRP	375.0000 IN. Z0
				SCALE	.0100

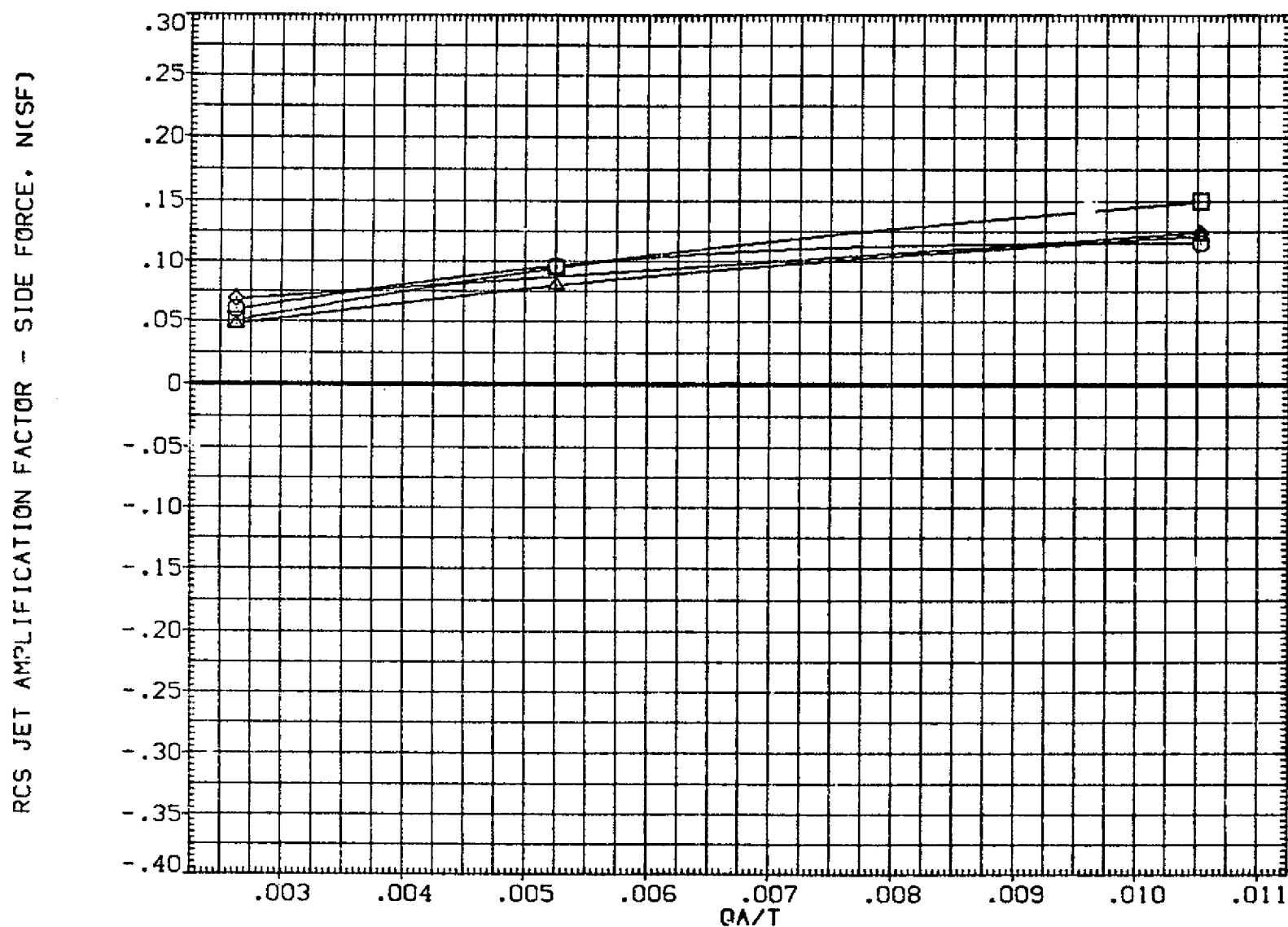


FIGURE 81. EFFECT OF ELEVON/BODY FLAP ON AMPLIFICATION FACTOR, JETS N79N78
(E) ALPHA = 35.00

01N79

LARC CFHT 118 (MA-22)

(CJA187)

SYMBOL	T/QA-1	PARAMETRIC VALUES
○	47.500	MACH 10.330 ALPHA -10.000
□	95.000	BDFLAP .000 T/QA 47.500
◇	190.000	NOJET 1.000 ELEVON .000

REFERENCE INFORMATION

SREF	2690.0000	50.FT.
LREF	474.8000	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - PITCH, NCPM)

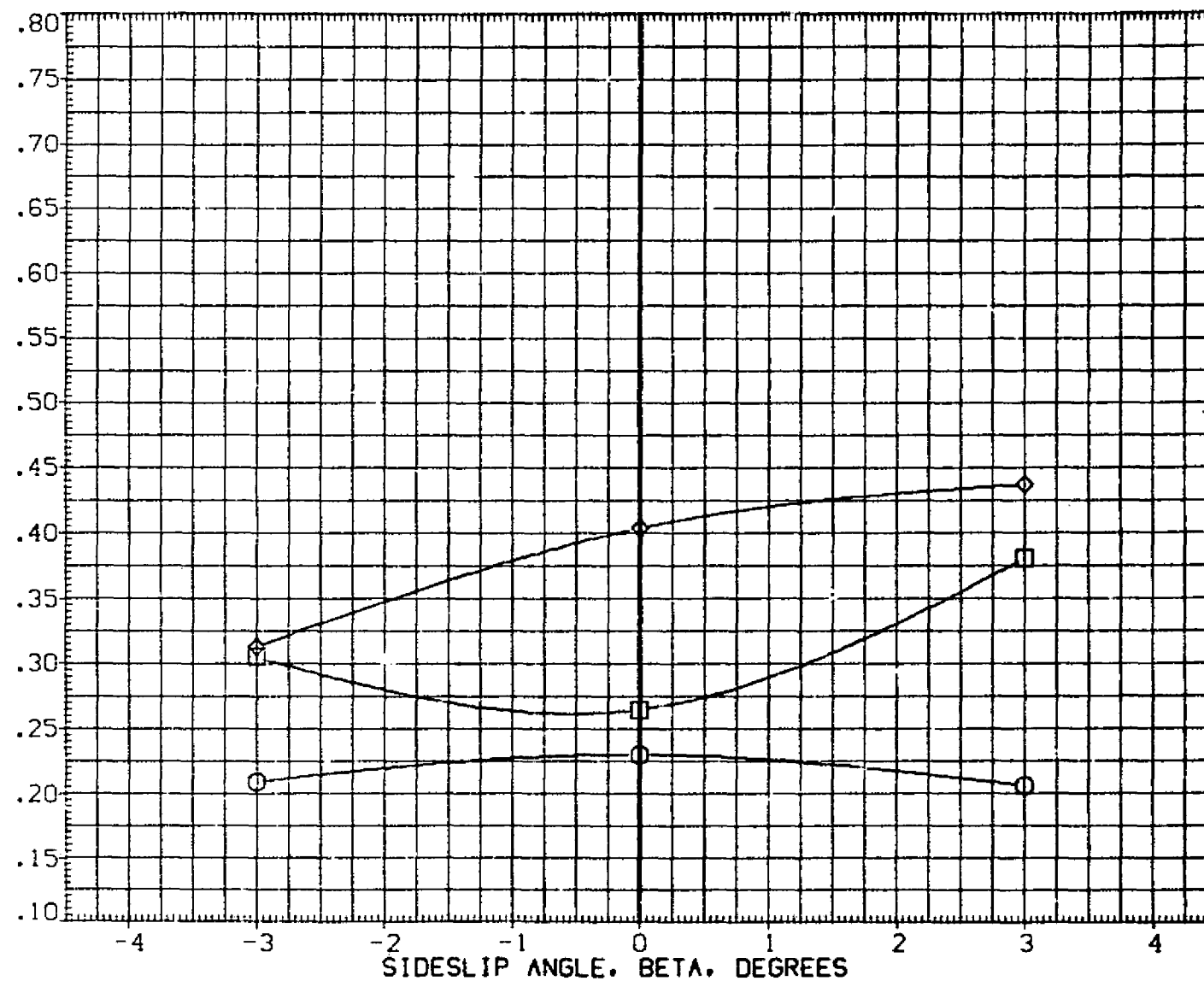


FIGURE 82. AMPLIFICATION FACTOR IN YAW, N79 JETS

01N79

LARC CFHT 118 (MA-22)

(CJA187)

SYMBOL

○
□
◇

T/QA-1

MACH

BOFLAP

NO.JET

PARAMETRIC VALUES

10.330

ALPHA

T/QA

ELEVON

.000

47.500

.000

REFERENCE INFORMATION

SREF 2690.0000

LREF 474.8000

BREF 936.6800

XMRP 1076.7000

YMRP .0000

ZMRP 375.0000

SCALE .0100

SQ.FT.

INCHES

INCHES

IN. X0

IN. Y0

IN. Z0

RCS JET AMPLIFICATION FACTOR - PITCH, N(PM)

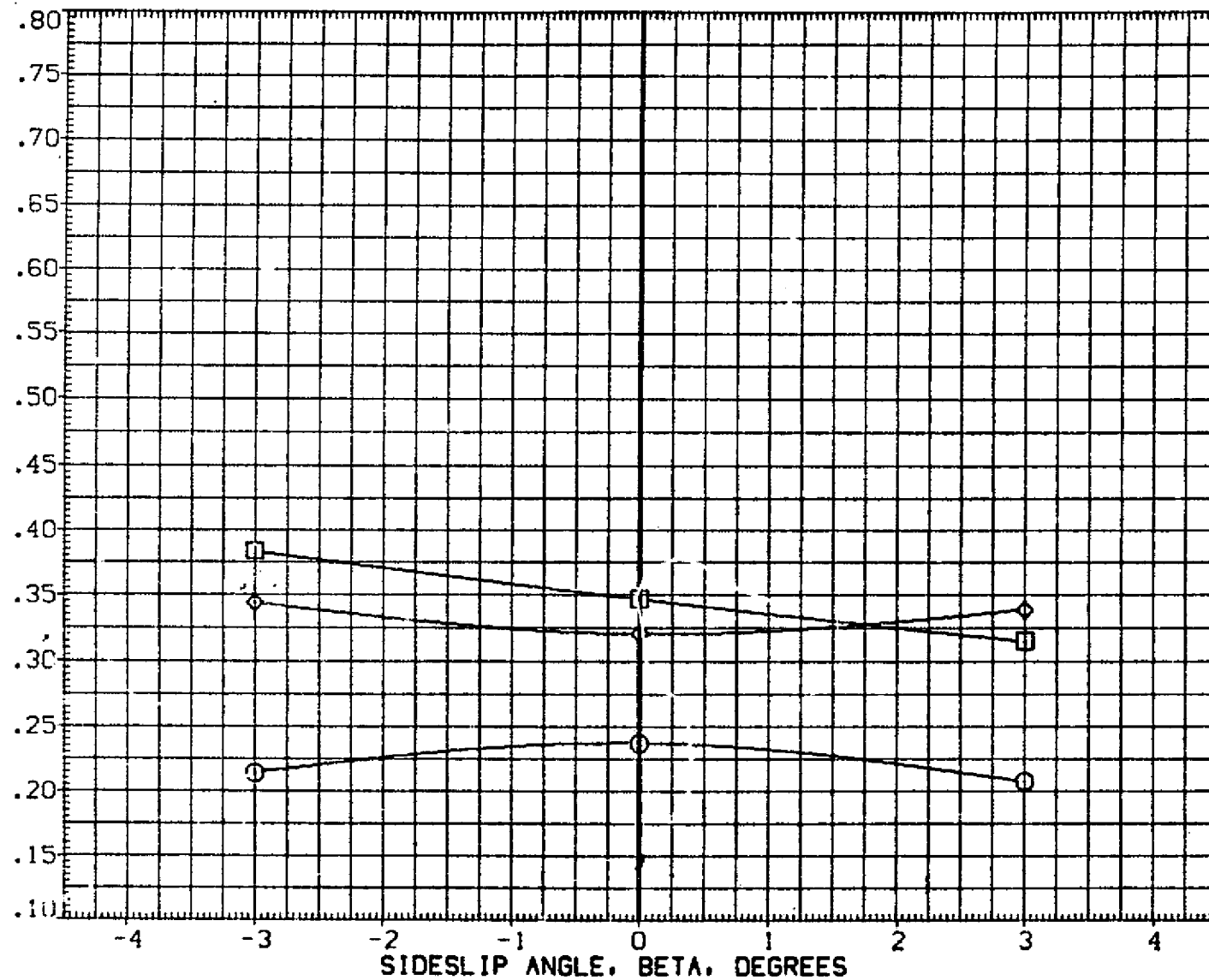


FIGURE 82. AMPLIFICATION FACTOR IN YAW, N79 JETS

01N79

LARC CFHT 118 (MA-22)

(CJA187)

SYMBOL	T/QA-1	PARAMETRIC VALUES
○	47.500	MACH 10.330 ALPHA 10.000
□	95.000	BDFLAP .000 T/QA 47.500
◇	190.000	NO.JET 1.000 ELEVON .000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8000	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - PITCH, N(PM)

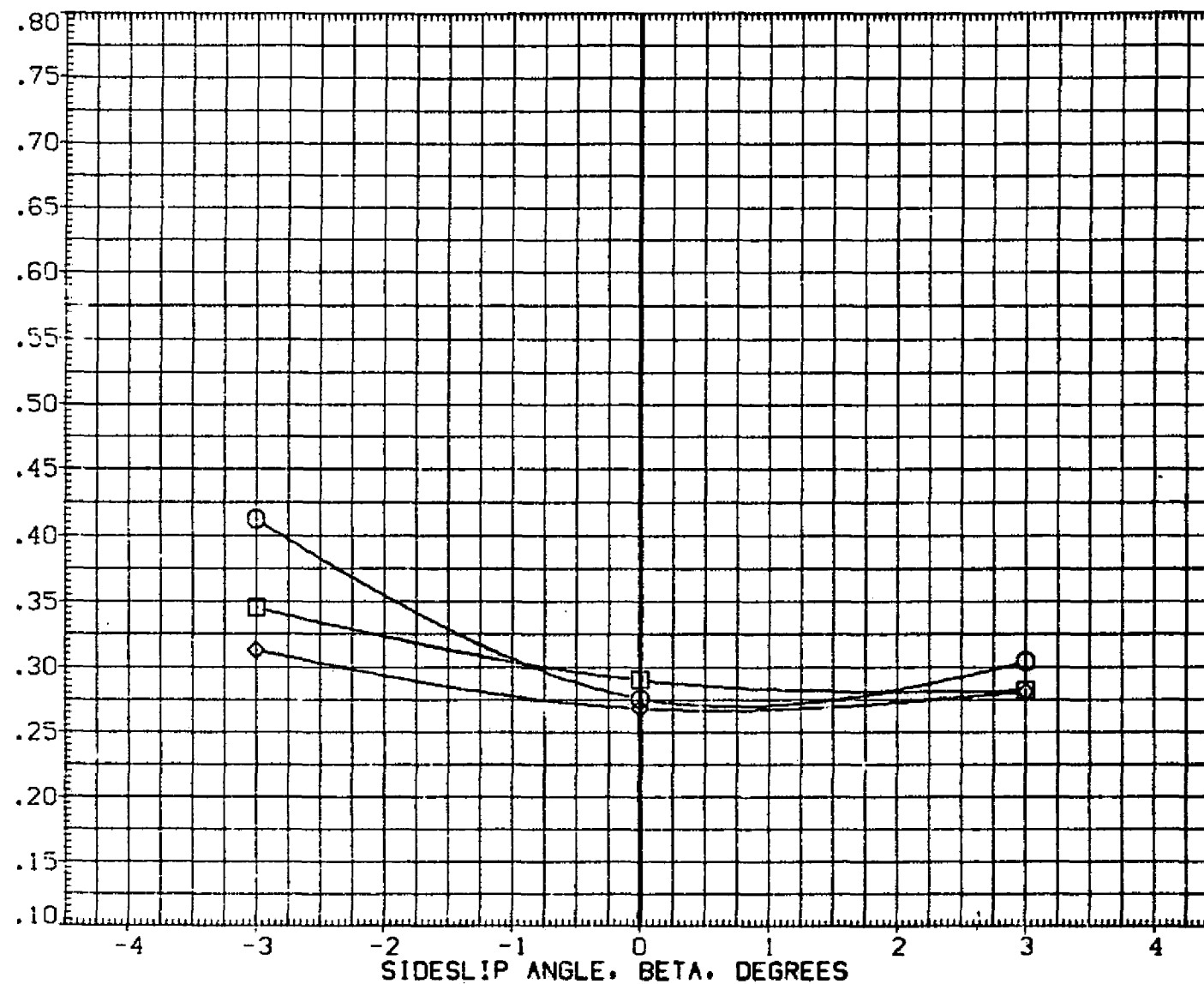


FIGURE 82. AMPLIFICATION FACTOR IN YAW, N79 JETS

01N79

LARC CFHT 118 (MA-22)

(CJA187)

SYMBOL	T/QA-1	PARAMETRIC VALUES
○	47.500	MACH 10.330 ALPHA 20.000
□	95.000	BDFLAP .000 T/QA 47.500
◇	190.000	NO.JET 1.000 ELEVON .000

REFERENCE INFORMATION		
SREF	2690.0000	50.FT.
LREF	474.8000	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. XD
YMRP	.0000	IN. YD
ZMRP	375.0000	IN. ZD
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - PITCH, N(PM)

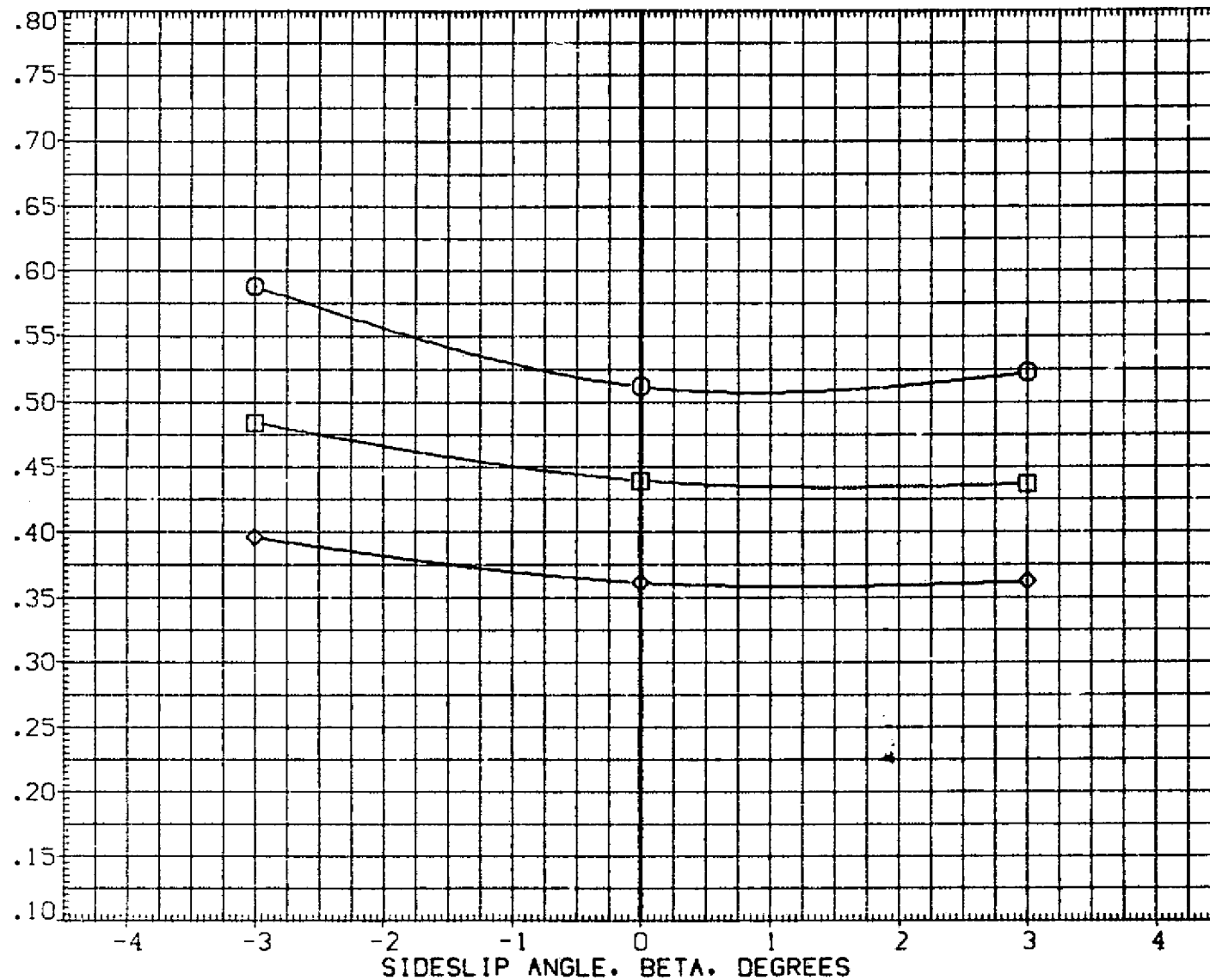


FIGURE 82. AMPLIFICATION FACTOR IN YAW, N79 JETS

01N79

LARC CFHT 118 (MA-22)

(CJA187)

SYMBOL	T/OA-1	PARAMETRIC VALUES			
○	47.500	MACH	10.330	ALPHA	35.000
□	95.000	BDFLAP	.000	T/OA	47.500
◇	190.000	NO.JET	1.000	ELEVON	.000

REFERENCE INFORMATION		
SREF	2690.0000	50.FT.
LREF	474.8000	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - PITCH, N(PM)

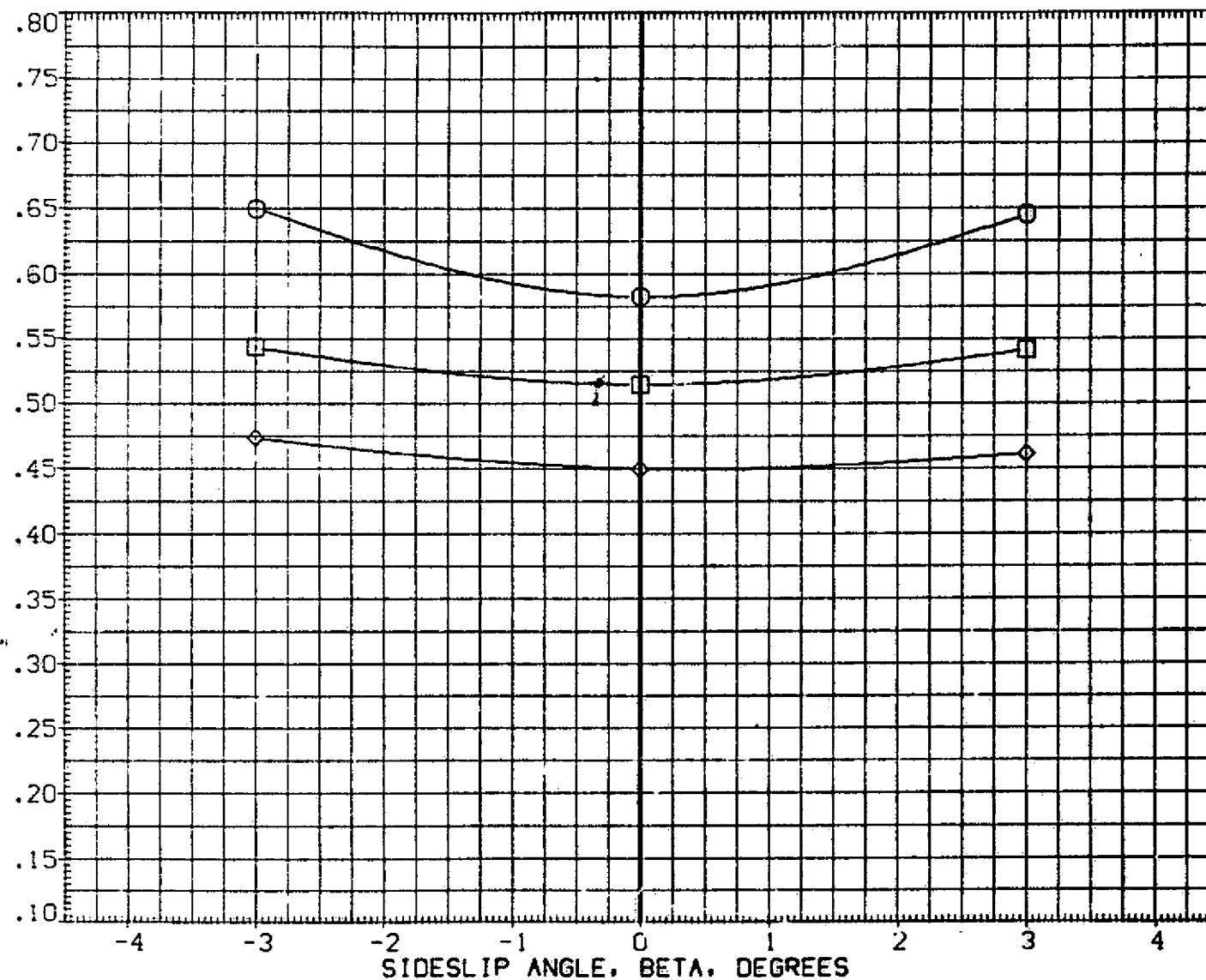


FIGURE 82. AMPLIFICATION FACTOR IN YAW, N79 JETS

01N79

LARC CFHT 118 (MA-22)

(CJA187)

SYMBOL	T/QA-1	PARAMETRIC VALUES			
○	47.500	MACH	10.330	ALPHA	-10.000
□	95.000	BOFLAP	.000	T/QA	47.500
◇	130.000	NO.JET	1.000	ELEVON	.000

REFERENCE INFORMATION		
SREF	2690.0000	SO.FT.
LREF	474.8000	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - ROLL, N(RM)

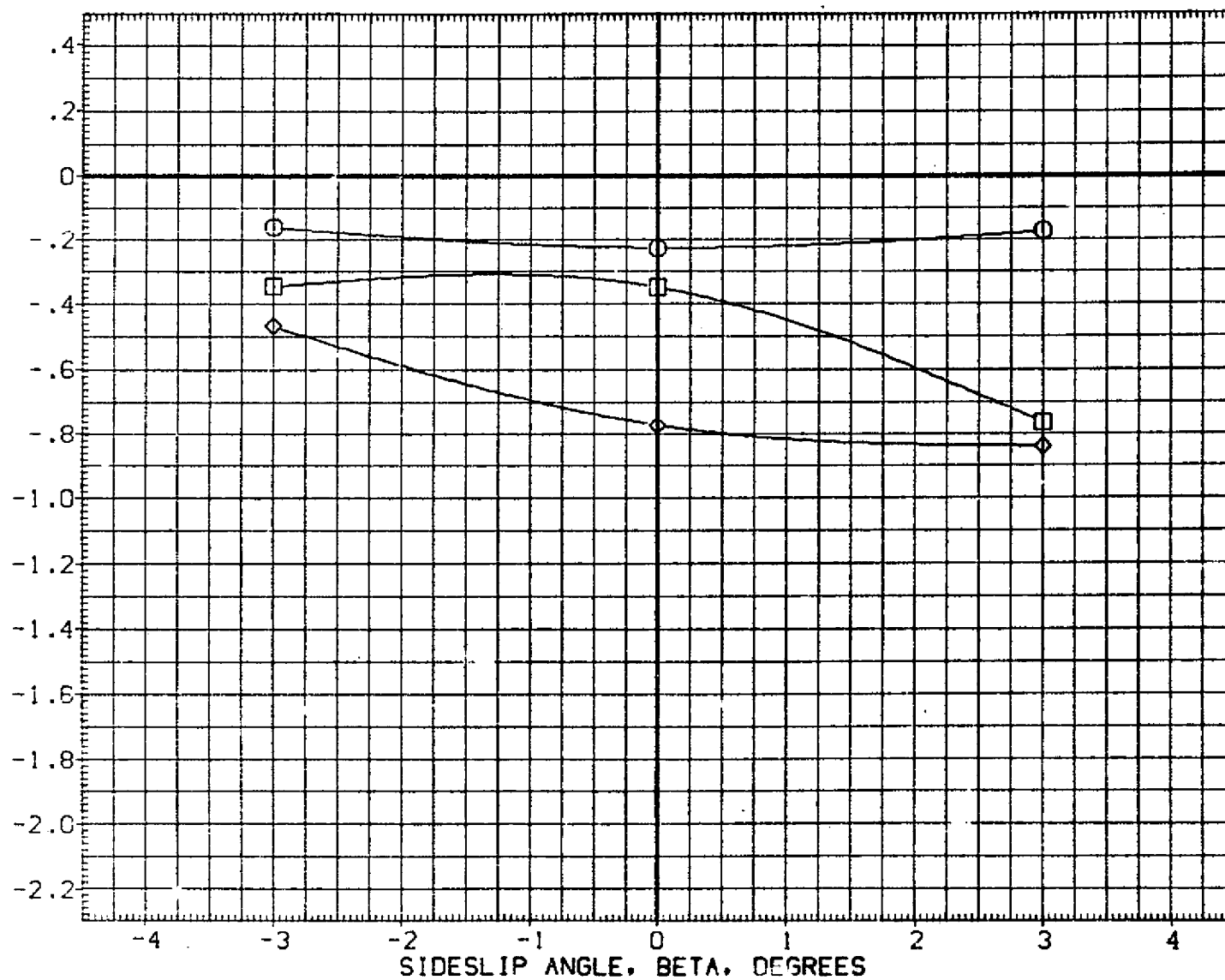


FIGURE 82. AMPLIFICATION FACTOR IN YAW, N79 JETS

01N79

LARC CFHT 118 (MA-22)

(CJA187)

SYMBOL	T/QA-1	PARAMETRIC VALUES
○	47.500	MACH 10.330 ALPHA .000
□	95.000	BOFLAP .000 T/QA 47.500
◇	190.000	NO JET 1.000 ELEVON .000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8000	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - ROLL, N(RM)

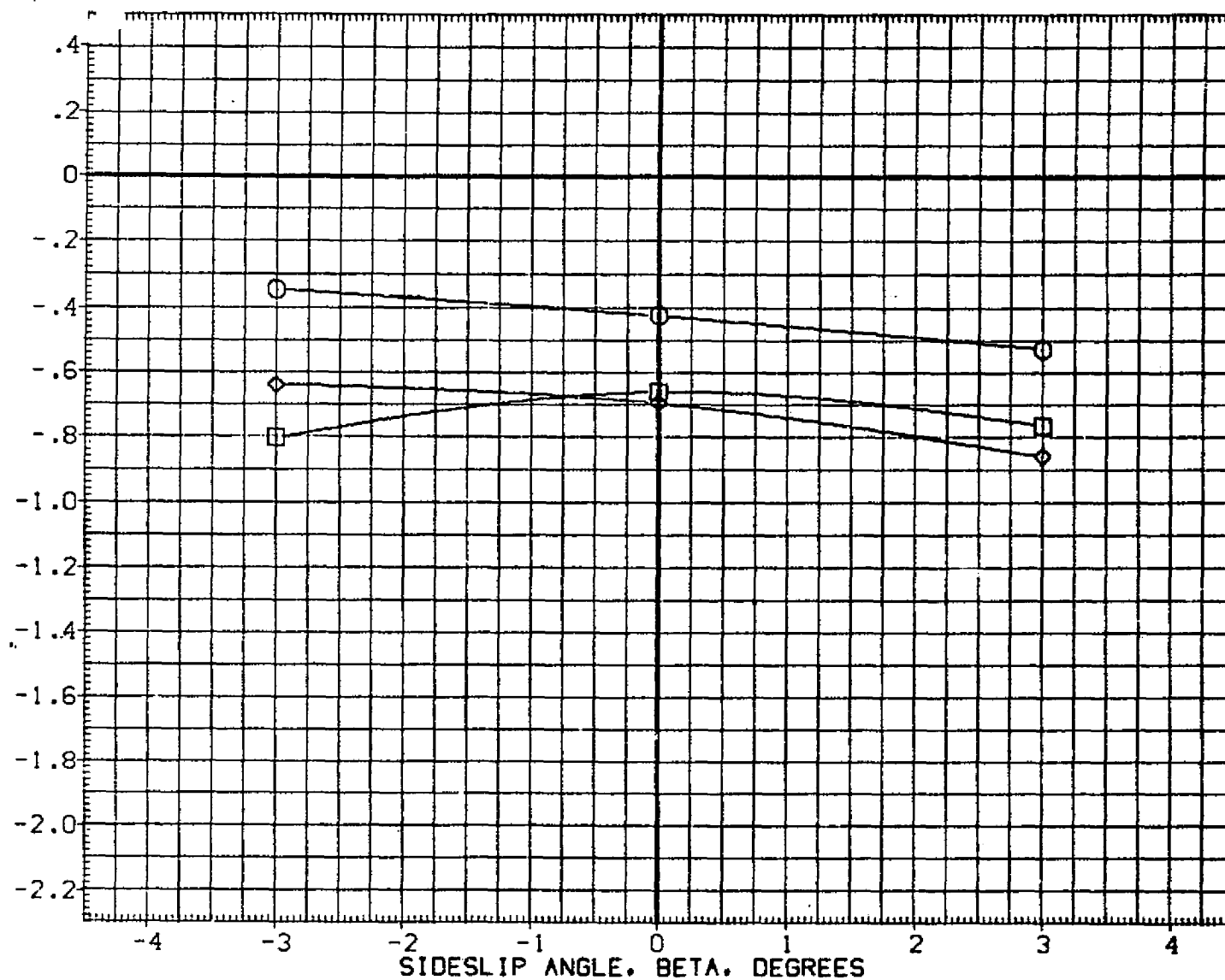


FIGURE 82. AMPLIFICATION FACTOR IN YAW, N79 JETS

SYMBOL	T/QA-1	PARAMETRIC VALUES
○	47.500	MACH 10.330 ALPHA 10.000
□	95.000	BDFLAP .000 T/QA 47.500
◇	190.000	NOJET 1.000 ELEVON .000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8000	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - ROLL, NCRM

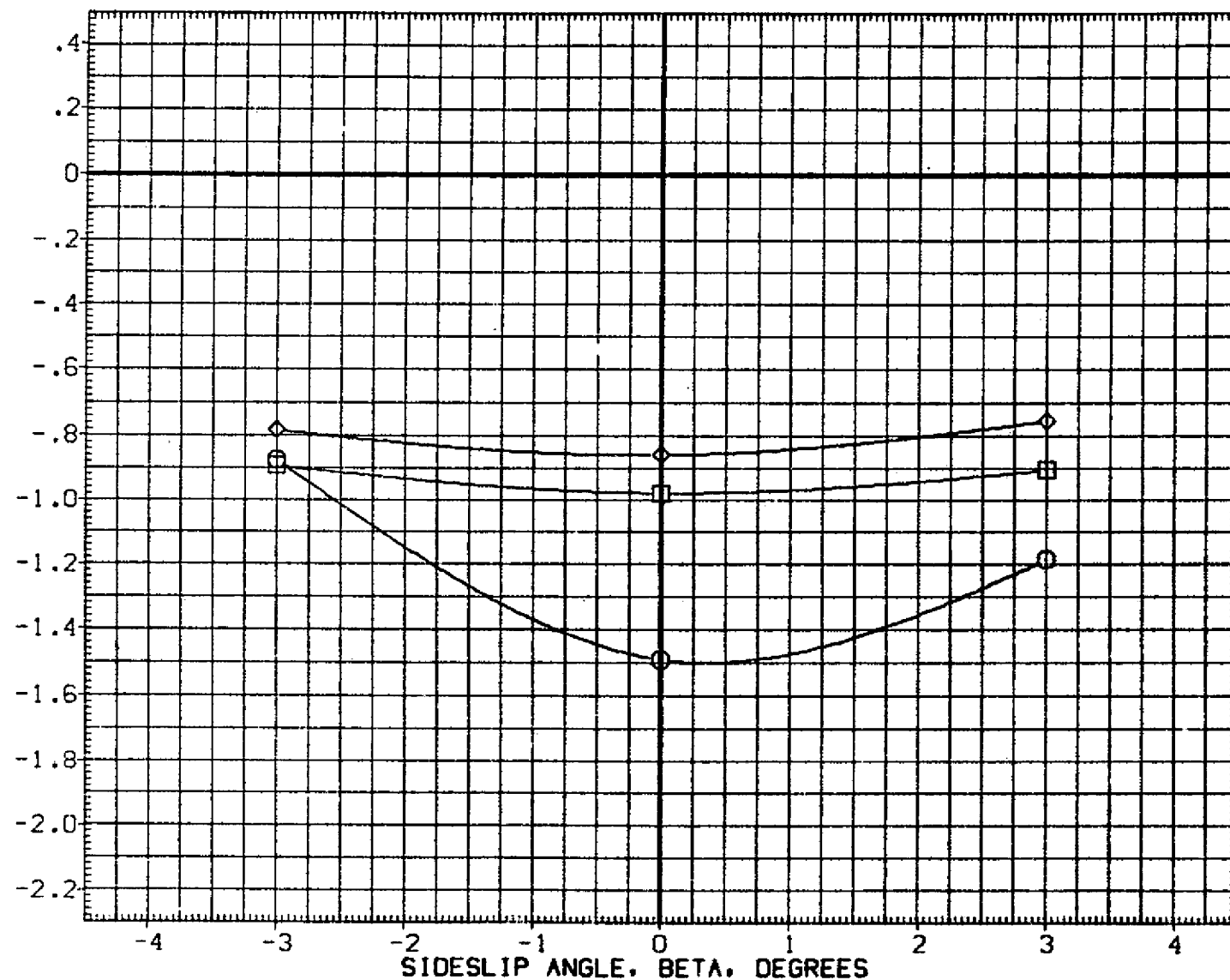


FIGURE 82. AMPLIFICATION FACTOR IN YAW, N79 JETS

01N79

LARC CFHT 118 (MA-22)

(CJA187)

SYMBOL	T/QA-1	PARAMETRIC VALUES			
○	47.500	MACH	10.330	ALPHA	20.000
□	95.000	BDFLAP	.000	T/QA	47.500
◇	190.000	NO.JET	1.000	ELEVON	.000

REFERENCE INFORMATION		
SREF	2690.0000	50.FT.
LREF	474.8000	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - ROLL, NCRM)

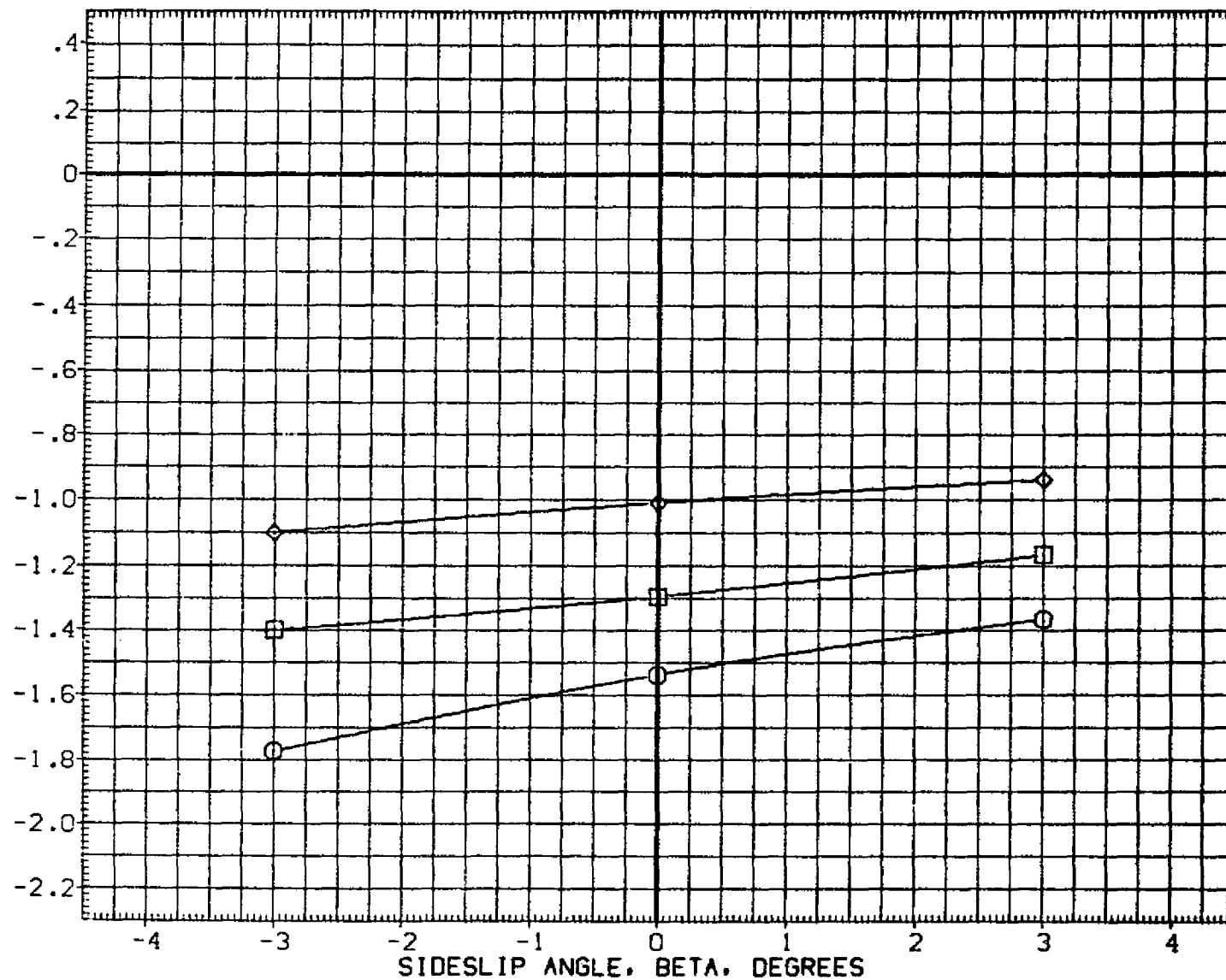


FIGURE 82. AMPLIFICATION FACTOR IN YAW, N79 JETS

SYMBOL	T/OA-1	PARAMETRIC VALUES			
○	47.500	MACH	10.330	ALPHA	35.000
□	95.000	BDFLAP	.000	T/OA	47.500
◇	190.000	NO.JET	1.000	ELEVON	.000

REFERENCE INFORMATION		
SREF	2690.0000	50.FT.
LREF	474.8000	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - ROLL, NCRM)

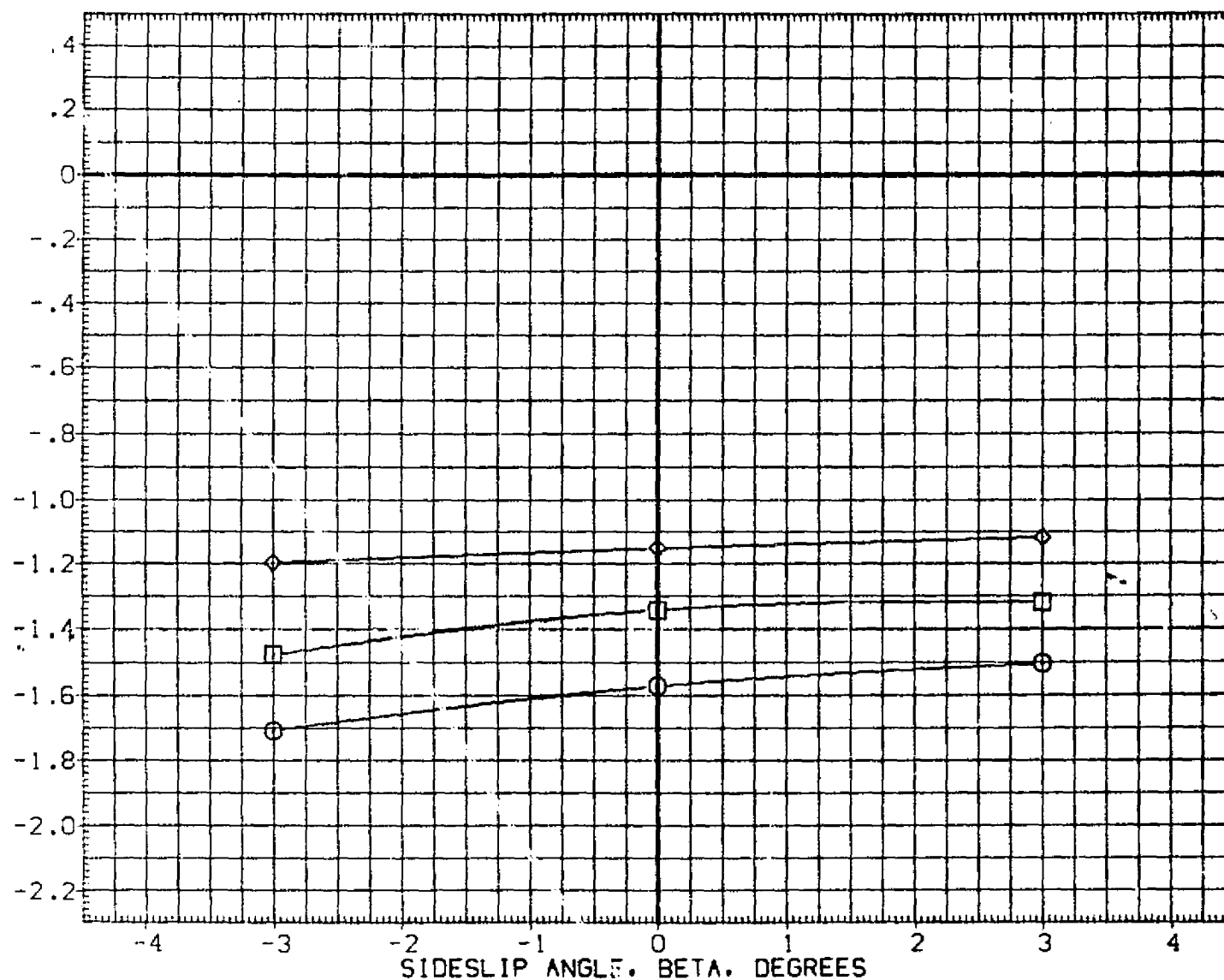


FIGURE 82. AMPLIFICATION FACTOR IN YAW, N79 JETS

01N79 LARC CFHT 118 (MA-22)

(CJA187)

SYMBOL	T/OA-1	PARAMETRIC VALUES			
○	47.500	MACH	10.330	ALPHA	-10.000
□	95.000	BDFLAP	.000	T/OA	47.500
◇	190.000	NO.JET	1.000	ELEVON	.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.Ft.
LREF	474.8000	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - YAW, N(YM)

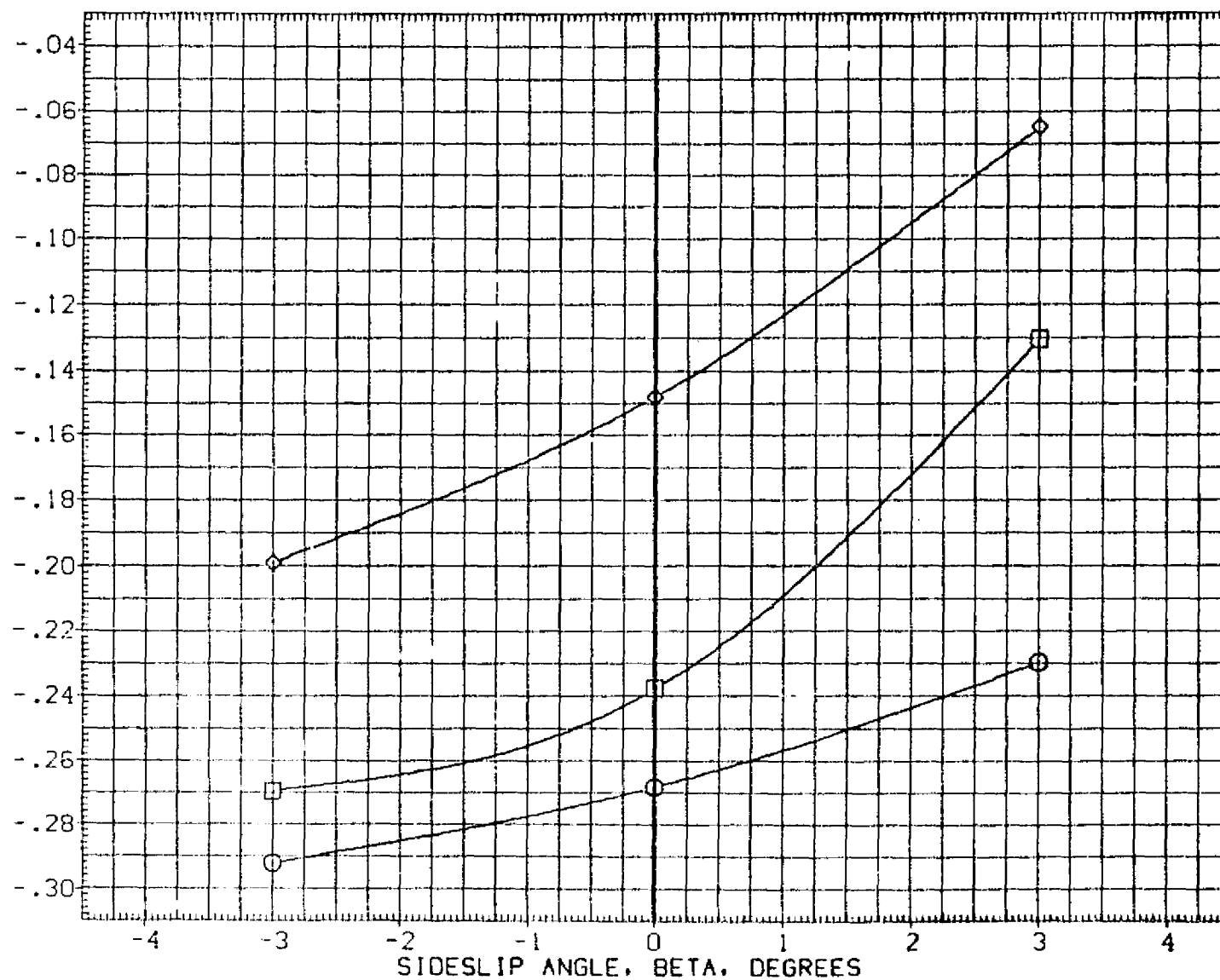


FIGURE 82. AMPLIFICATION FACTOR IN YAW, N79 JETS

01N79

LARC CPHT 118 (MA-22)

(CJA187)

SYMBOL	T/OA-1	MACH	PARAMETRIC VALUES	ALPHA	T/OA	ELEVON
○	47.500	10.330	.000	.000	47.500	.000
□	95.000	10.330	.000	.000	47.500	.000
◇	190.000	10.330	.000	.000	47.500	.000

REFERENCE INFORMATION

SREF	2690.0000	10. FT.
REF	474.8000	ES
REF	936.6800	CHES
REF	1076.7000	IN. 10
REF	.0000	IN. 10
REF	375.0000	IN. 20
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - YAW, N(YM)

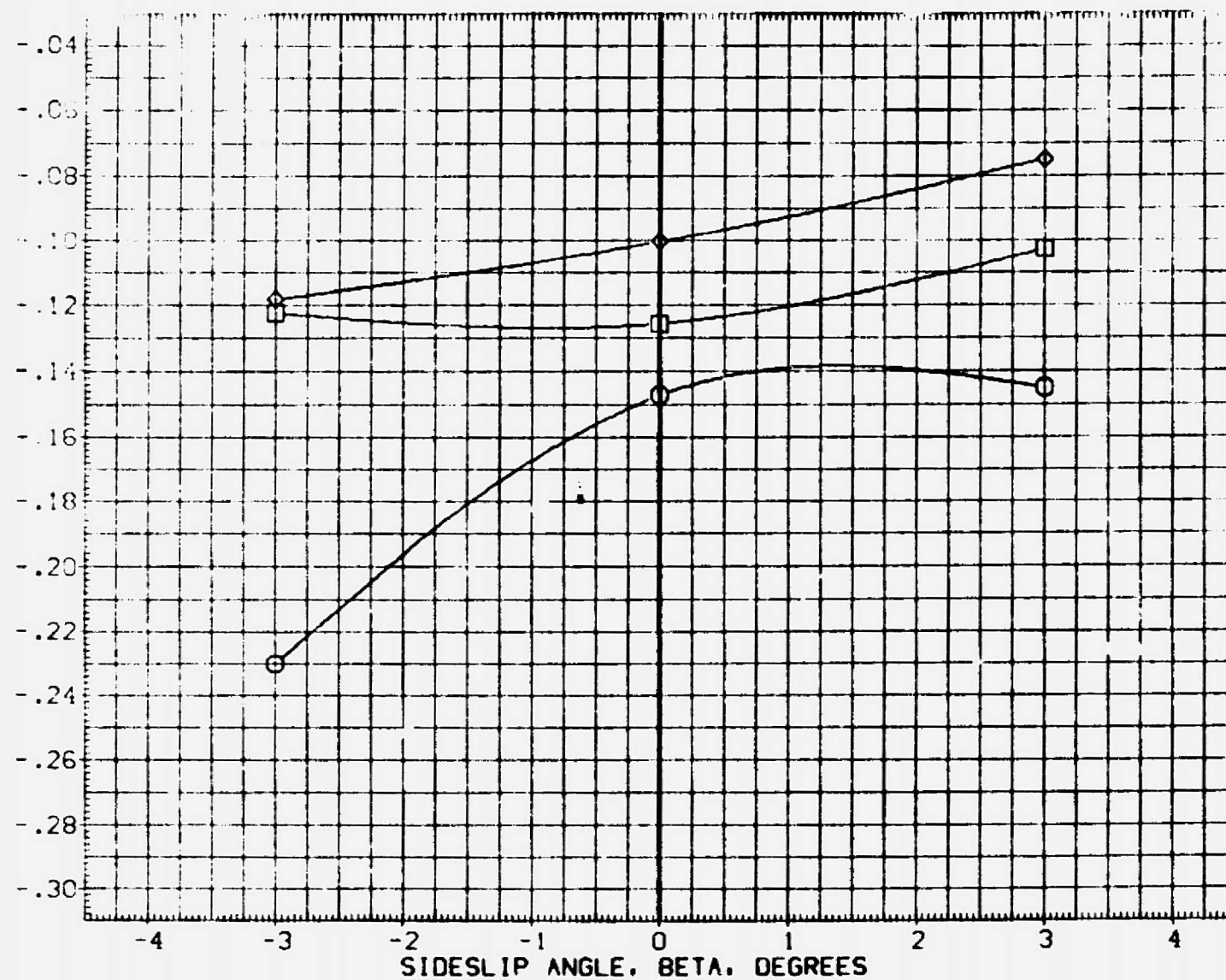


FIGURE 82. AMPLIFICATION FACTOR IN YAW, N79 JETS

01N79

LARC CFHI 118 (MA-22)

(CJA187)

SYMBOL	T/QA-1	PARAMETRIC VALUES			
○	47.500	MACH	10.330	ALPHA	10.000
□	95.000	BOFLAP	.000	T/QA	47.500
◇	190.000	NO.JET	1.000	ELEVON	.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8000	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - YAW, NCYM)

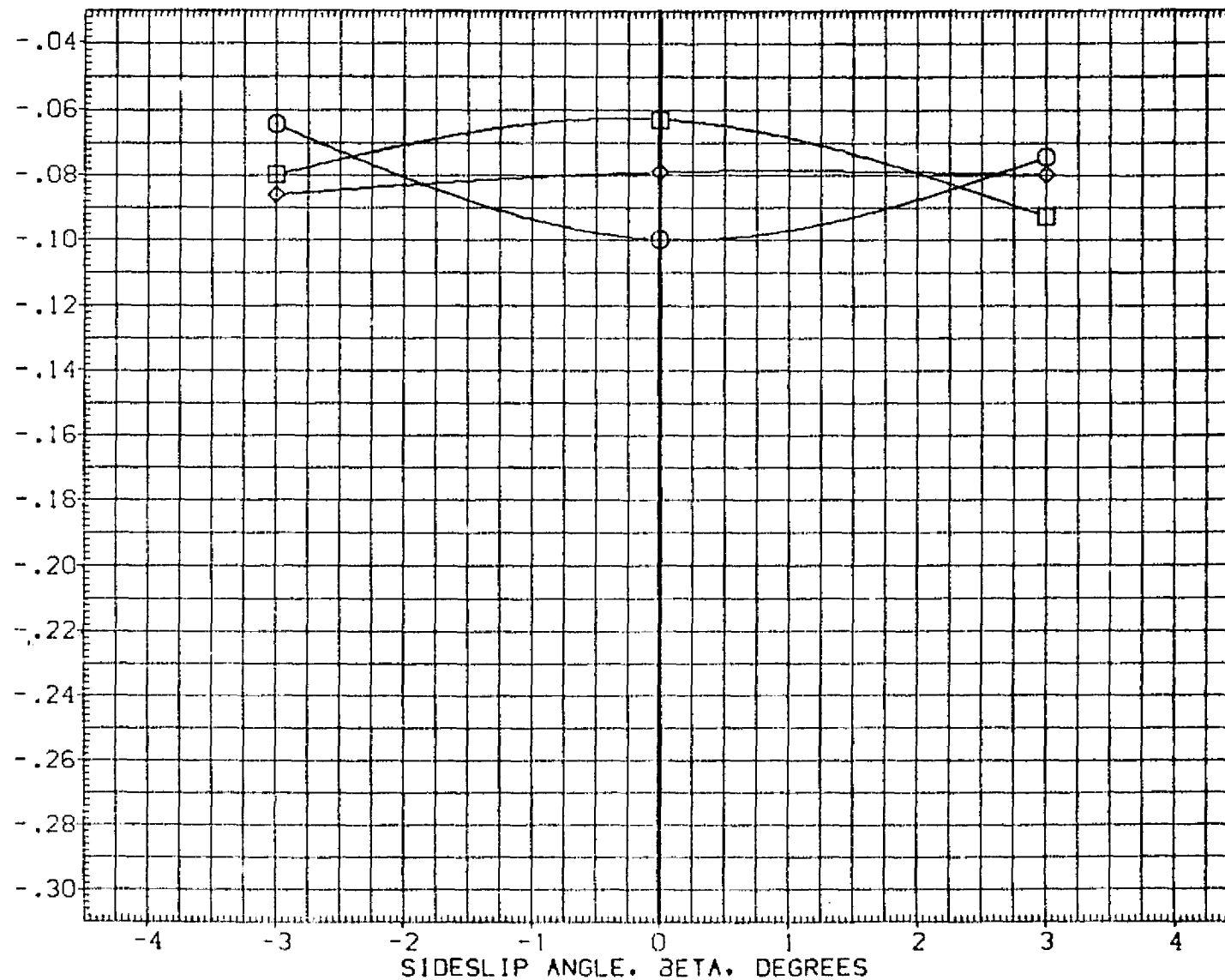


FIGURE 82. AMPLIFICATION FACTOR IN YAW, N79 JETS

01N79

LARC CFHT 118 (MA-22)

(CJA187)

SYMBOL	T/OA-1	PARAMETRIC VALUES
○	47.500	MACH 10.330 ALPHA 20.000
□	95.000	80% LAP .000 T/OA 47.500
◇	190.000	NO JET 1.000 ELEVON .000

REFERENCE INFORMATION		
SREF	690.0000	50. FT.
LEEF	474.8000	INCHES
BREF	936.6000	INCHES
CHRP	1076.7000	IN. X0
YHRP	.0000	IN. Y0
ZHRP	375.0000	IN. Z0
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - YAW, NCYM

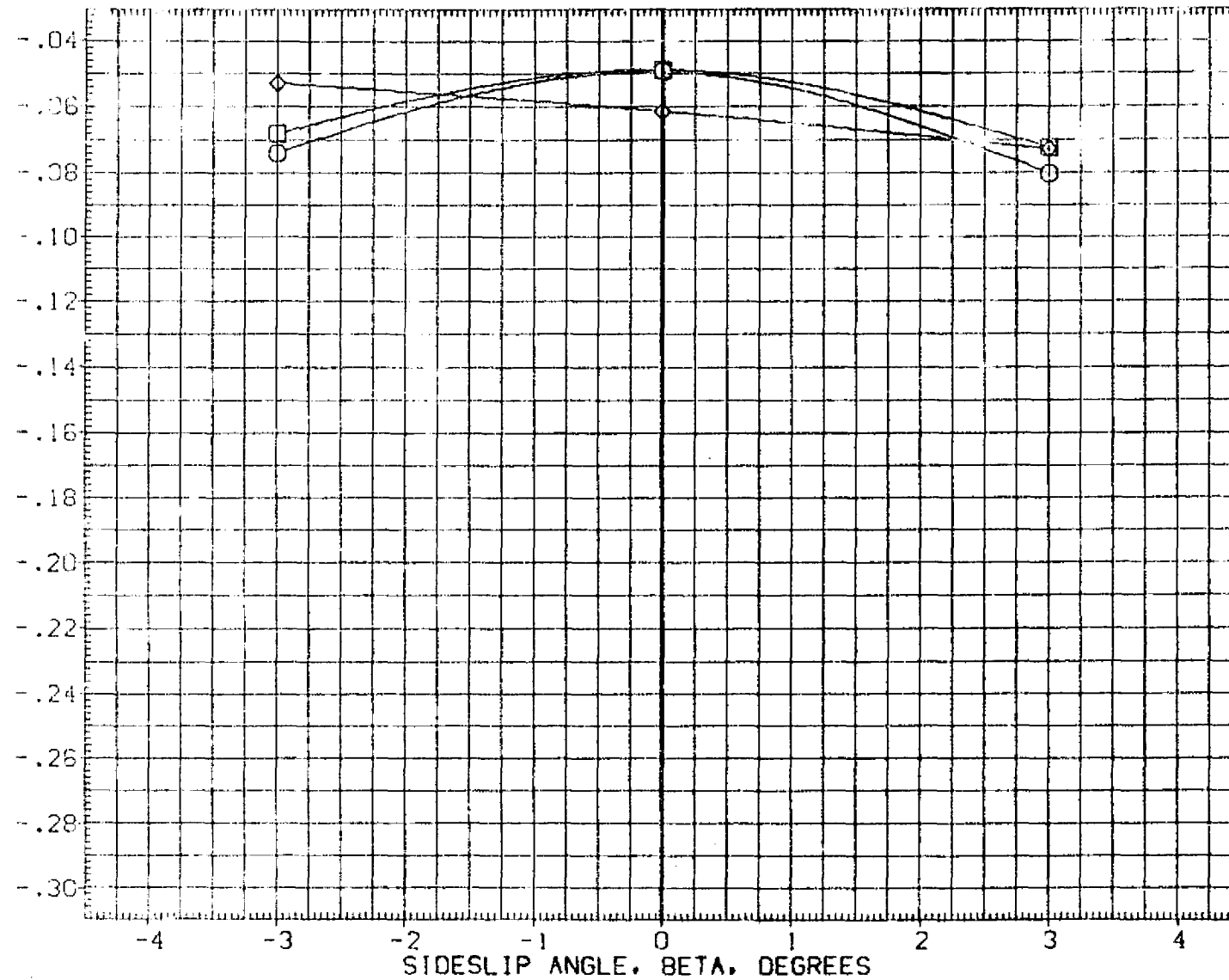


FIGURE 82. AMPLIFICATION FACTOR IN YAW, N79 JETS

01N79

LARC CFIIT 118 (MA 22)

(CJA187)

SYMBOL	T/QA-1	PARAMETRIC VALUES
○	47.500	MACH 10.330 ALPHA 35.000
□	95.000	BDFLAP .000 T/QA 47.500
◇	190.000	NO.JET 1.000 ELEVON .000

REFERENCE INFORMATION	
SREF	2690.0000 SQ.FT.
LREF	474.8000 INCHES
BREF	936.6800 INCHES
XMRP	1076.7000 IN. X0
YMRP	.0000 IN. Y0
ZMRP	375.0000 IN. Z0
SCALE	.0100

RCS JET AMPLIFICATION FACTOR - YAW, N(YM)

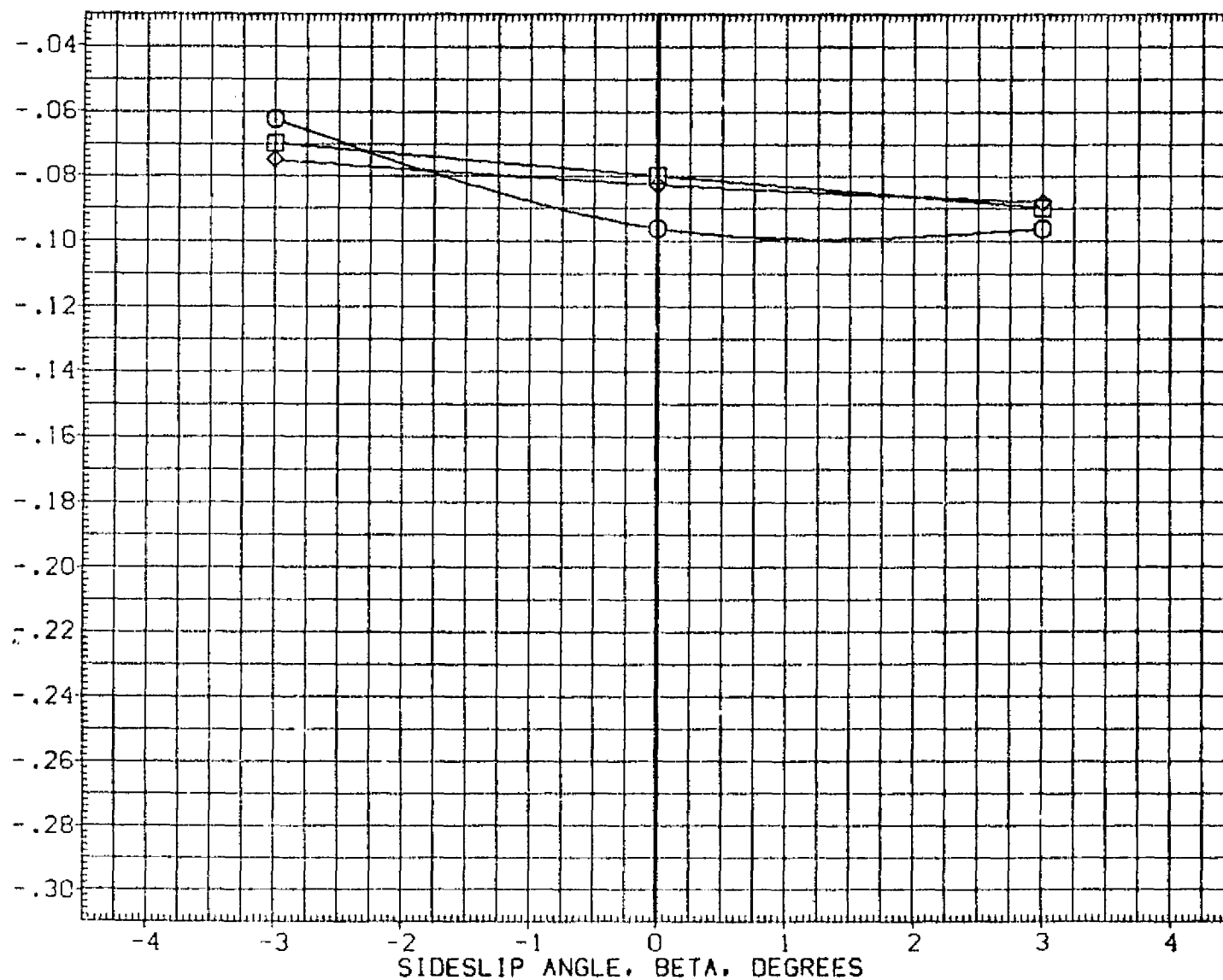


FIGURE 82. AMPLIFICATION FACTOR IN YAW, N79 JETS

SYMBOL	T/QA-1	PARAMETRIC VALUES
○	47.500	MACH 10.330 ALPHA -10.000
□	95.000	80FLAP .000 T/QA 47.500
◇	190.000	NO JET 1.000 ELEVON .000

REFERENCE INFORMATION	
SREF	2690.0000 SQ. FT.
LREF	474.8000 INCHES
QREF	336.6800 LBS
YMRP	1076.7000 IN. 10
ZMRP	375.0000 IN. 20
SCALE	.0100

RCS JET AMPLIFICATION FACTOR - NORMAL FORCE. N(NF)

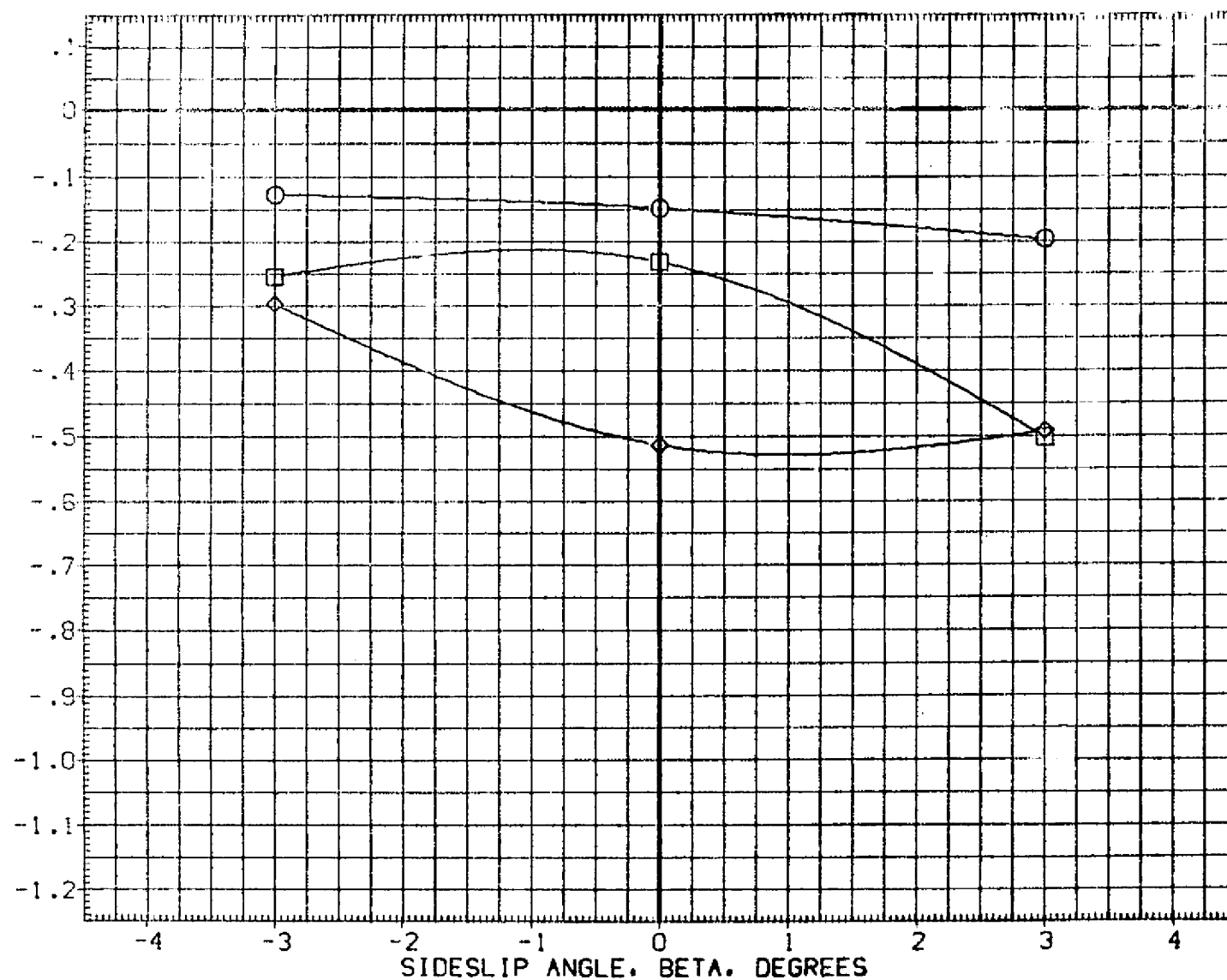


FIGURE 82. AMPLIFICATION FACTOR IN YAW, N79 JETS

01N79

LARC CEHT 118 (MA-22)

(CJA187)

SYMBOL	T/QA-1	PARAMETRIC VALUES
○	47.500	MACH 10.330 ALPHA .000
□	95.000	BDFLAP .000 T/QA 47.500
◇	190.000	NO JET 1.000 ELEVON .000

REFERENCE INFORMATION		
SREF	2690.0000	50. FT.
LREF	474.8000	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - NORMAL FORCE, N(NF)

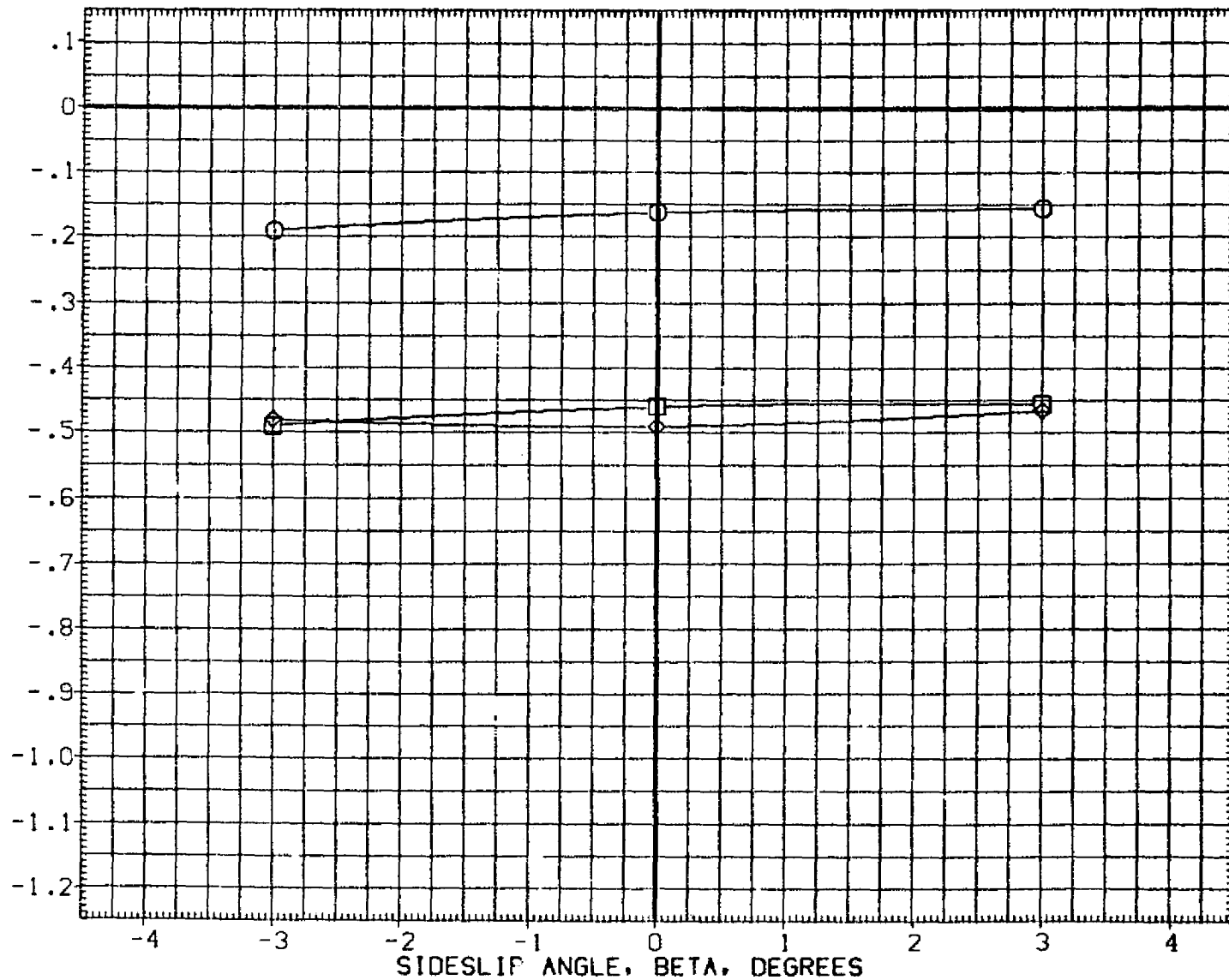


FIGURE 82. AMPLIFICATION FACTOR IN YAW, N79 JETS

01N79

LARC CFHT 118 (MA-22)

(CJA187)

SYMBOL	T/OA-1	PARAMETRIC VALUES
○	47.500	MACH 10.330 ALPHA 10.000
□	95.000	BCFLAP .000 T/OA 47.500
◇	190.000	NO.JET 1.000 ELEVON .000

REFERENCE INFORMATION		
SREF	2650.0000	SQ.FT.
LREF	474.8000	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - NORMAL FORCE, N(NF)

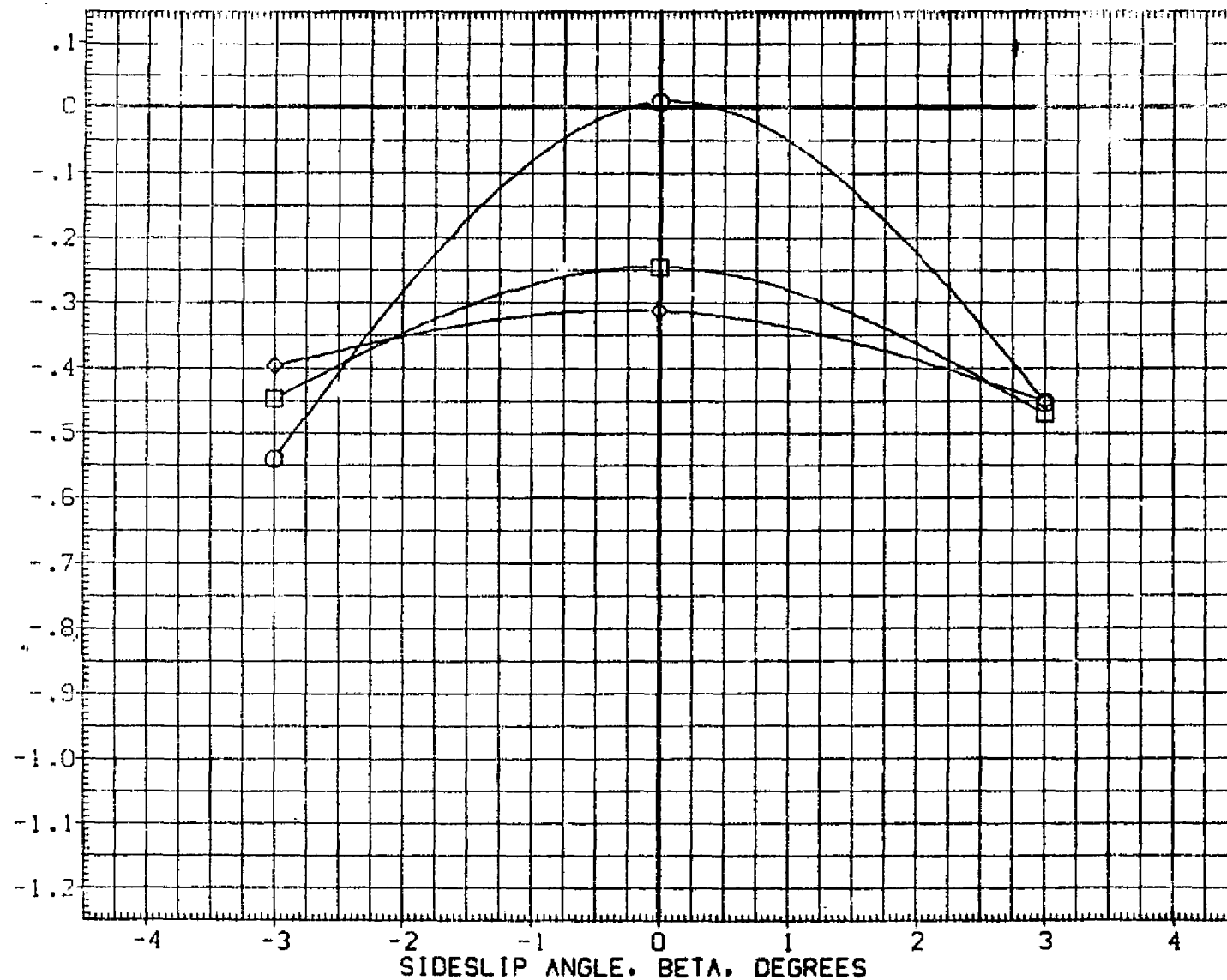


FIGURE 82. AMPLIFICATION FACTOR IN YAW, N79 JETS

01N79

LARC CFHT 118 (MA-22)

(CJA187)

SYMBOL	T/QA-1	PARAMETRIC VALUES
○	47.500	MACH 10.330 ALPHA 20.000
□	95.000	BDFLAP .000 T/QA 47.500
◇	190.000	NO.JET 1.000 ELEVON .000

REFERENCE INFORMATION		
SREF	2690.0000	50.FT.
LREF	474.8000	INCHES
BREF	938.6800	INCHES
XMRP	1076.7000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - NORMAL FORCE, N(NF)

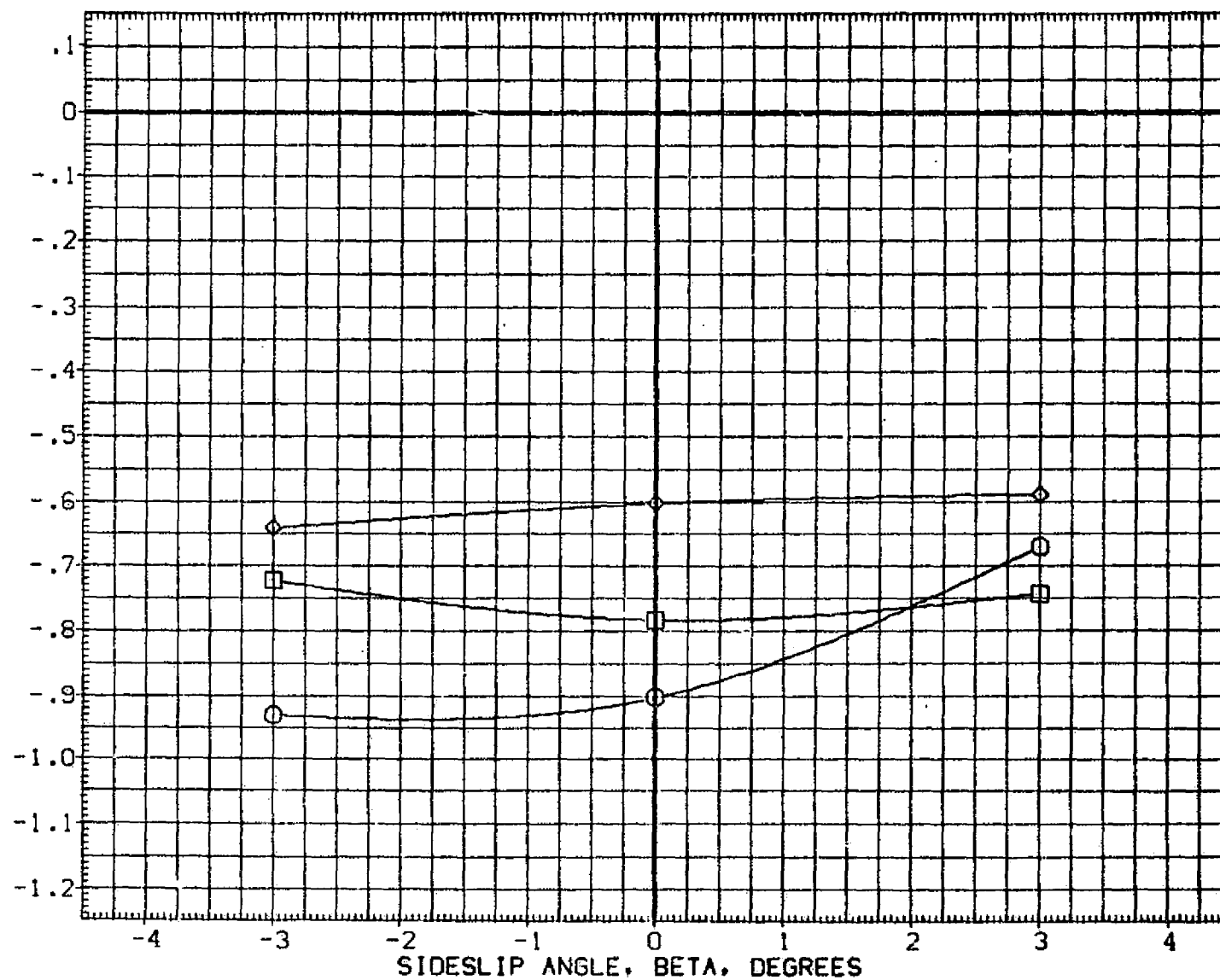


FIGURE 82. AMPLIFICATION FACTOR IN YAW, N79 JETS

01N79

LARC CFHT 118 (MA-22)

(CJA187)

SYMBOL	T/OA-1	MACH	PARAMETRIC VALUES		
○	47.500		10.330	ALPHA	35.000
□	95.000	BDFLAP	.000	T/OA	47.500
◇	190.000	NO JET	1.000	ELEVON	.000

REFERENCE INFORMATION		
SREF	2690.0000	50. FT.
LREF	474.8000	INCHES
BREF	936.6000	INCHES
AMRP	1076.7000	IN. X0
MRP	.0000	IN. Y0
LMRP	375.0000	IN. Z0
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - NORMAL FORCE, N(NF)

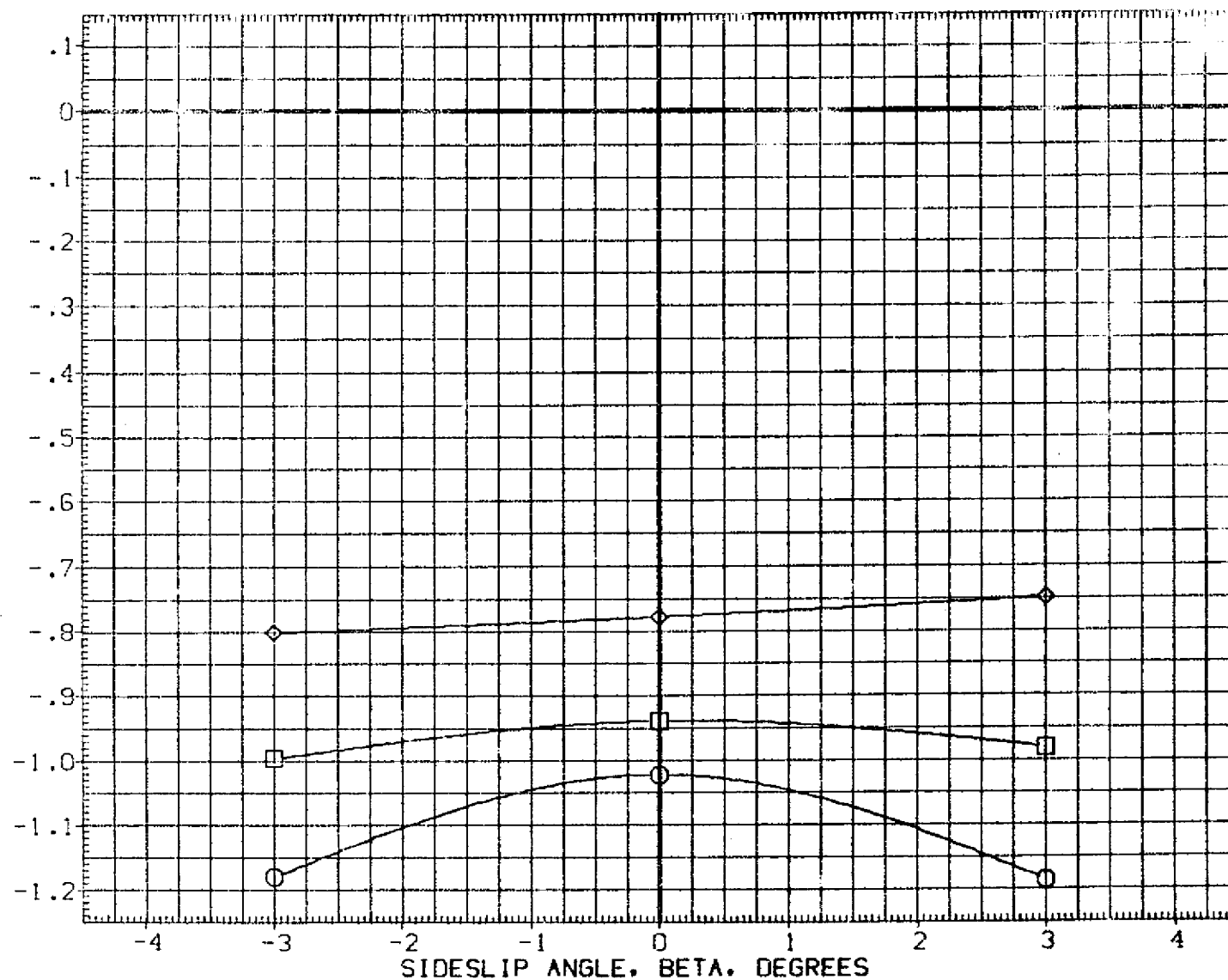


FIGURE 82. AMPLIFICATION FACTOR IN YAW, N79 JETS

01N79

ARC CEHT 118 (MA-22)

(CJA187)

SYMBOL	T/QA-1	MACH	PARAMETRIC VALUES	ALPHA	-10.000
○	47.500	BDFLAP	.000	T/QA	47.500
□	95.000	NO JET	1.000	ELEVON	.000
◇	190.000				

REFERENCE INFORMATION	
SREF	2690.0000 SQ. FT.
LREF	474.8000 INCHES
BREF	936.6800 INCHES
XMRP	1076.7000 IN. X0
YMRP	.0000 IN. Y0
ZMRP	375.0000 IN. Z0
SCALE	.0100

RCS JET AMPLIFICATION FACTOR - AXIAL FORCE, N(AF)

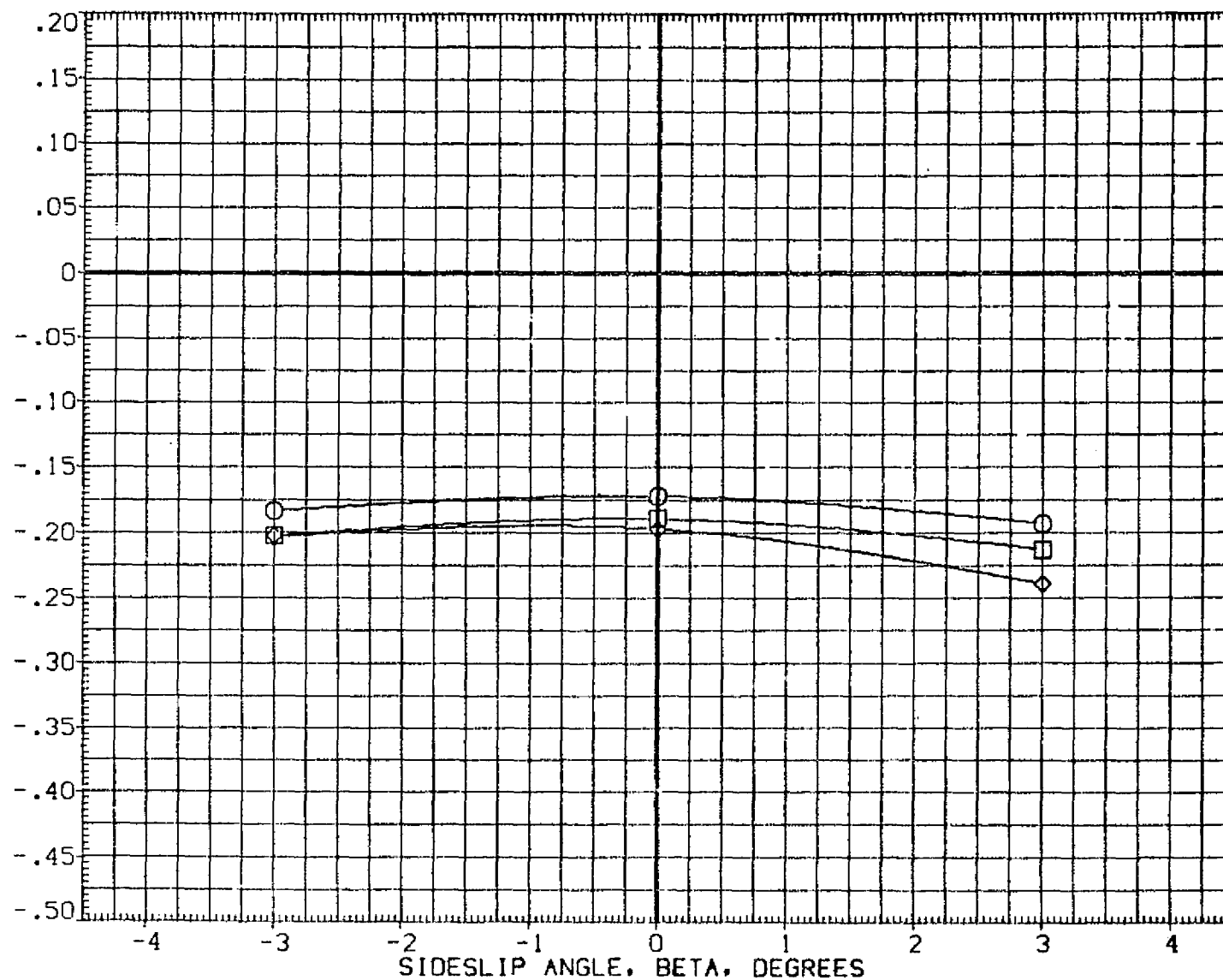


FIGURE 82. AMPLIFICATION FACTOR IN YAW, N79 JETS

SYMBOL	T/QA-1	PARAMETRIC VALUES			
○	47.500	MACH	10.330	ALPHA	.000
□	95.000	BDFLAP	.000	T/QA	47.500
◇	190.000	NO. JET	1.000	ELEVON	.000

REFERENCE INFORMATION		
SREF	2830.0000	SQ. FT.
LREF	474.8000	INCHES
WREF	936.8000	INCHES
XMRP	1076.7000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0100	

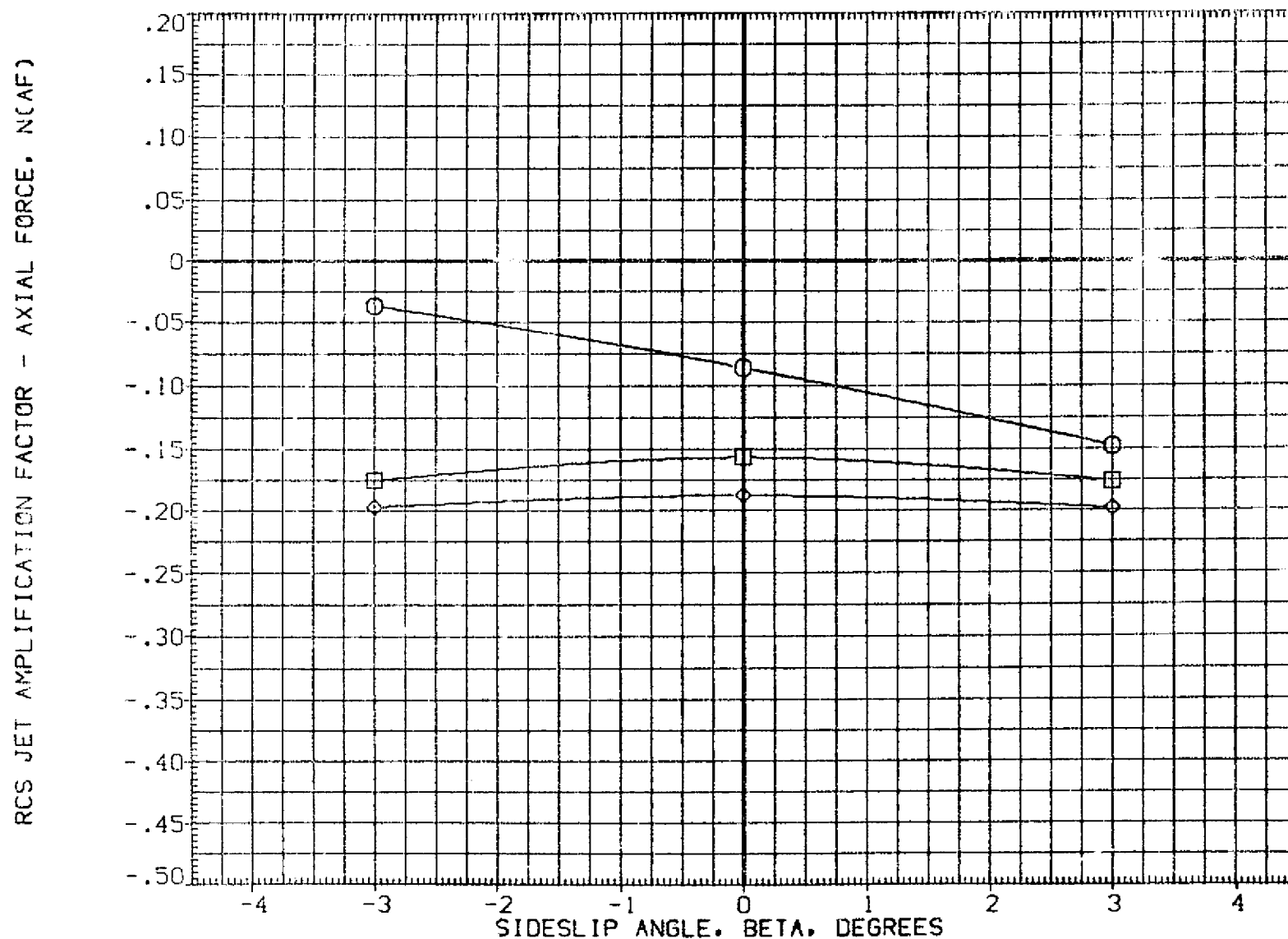


FIGURE 82. AMPLIFICATION FACTOR IN YAW, N79 JETS

01N79

LARC CEHT 118 (MA 22)

(CJA107)

SYMBOL	T/QA-1	PARAMETRIC VALUES			
○	47.500	MACH	10.330	ALPHA	10.000
□	95.000	BDFLAP	.000	T/QA	47.500
◇	190.000	NO.JET	1.000	ELEVON	.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8000	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - AXIAL FORCE, N(AF)

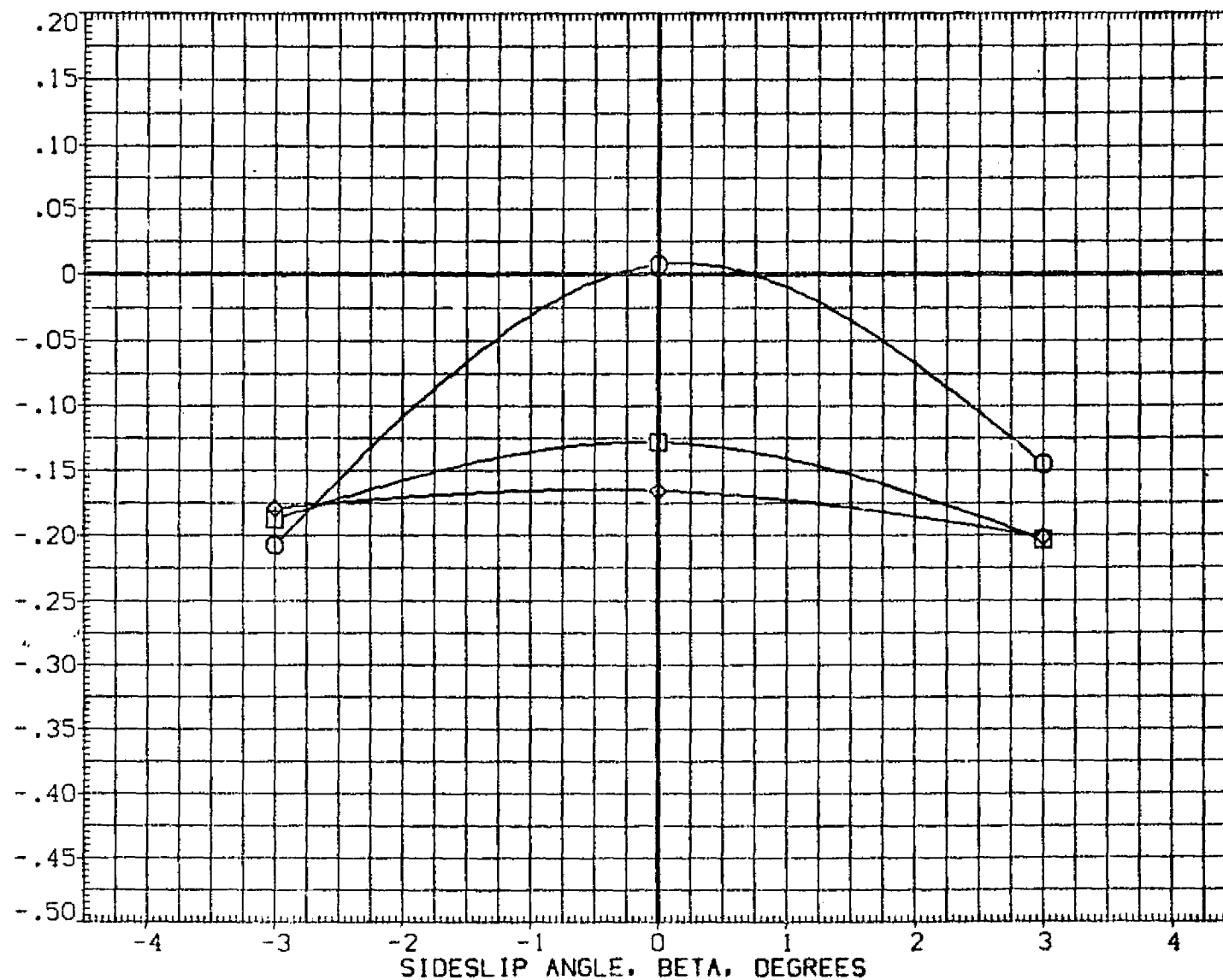


FIGURE 82. AMPLIFICATION FACTOR IN YAW, N79 JETS

SYMBOL	T/QA-1	PARAMETRIC VALUES
○	47.500	MACH 10.330 ALPHA 20.000
□	95.000	BDFLAP .000 T/QA 47.500
◇	190.000	NO. JET 1.000 ELEVON .000

REFERENCE INFORMATION		
SREF	2530.0000	SO. FT.
LREF	74.8000	INCHES
BREF	938.6800	INCHES
AMRP	1076.2000	IN. X0
VMRP	.0000	IN. Y0
EMRP	375.0000	IN. Z0
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - AXIAL FORCE, N(AF)

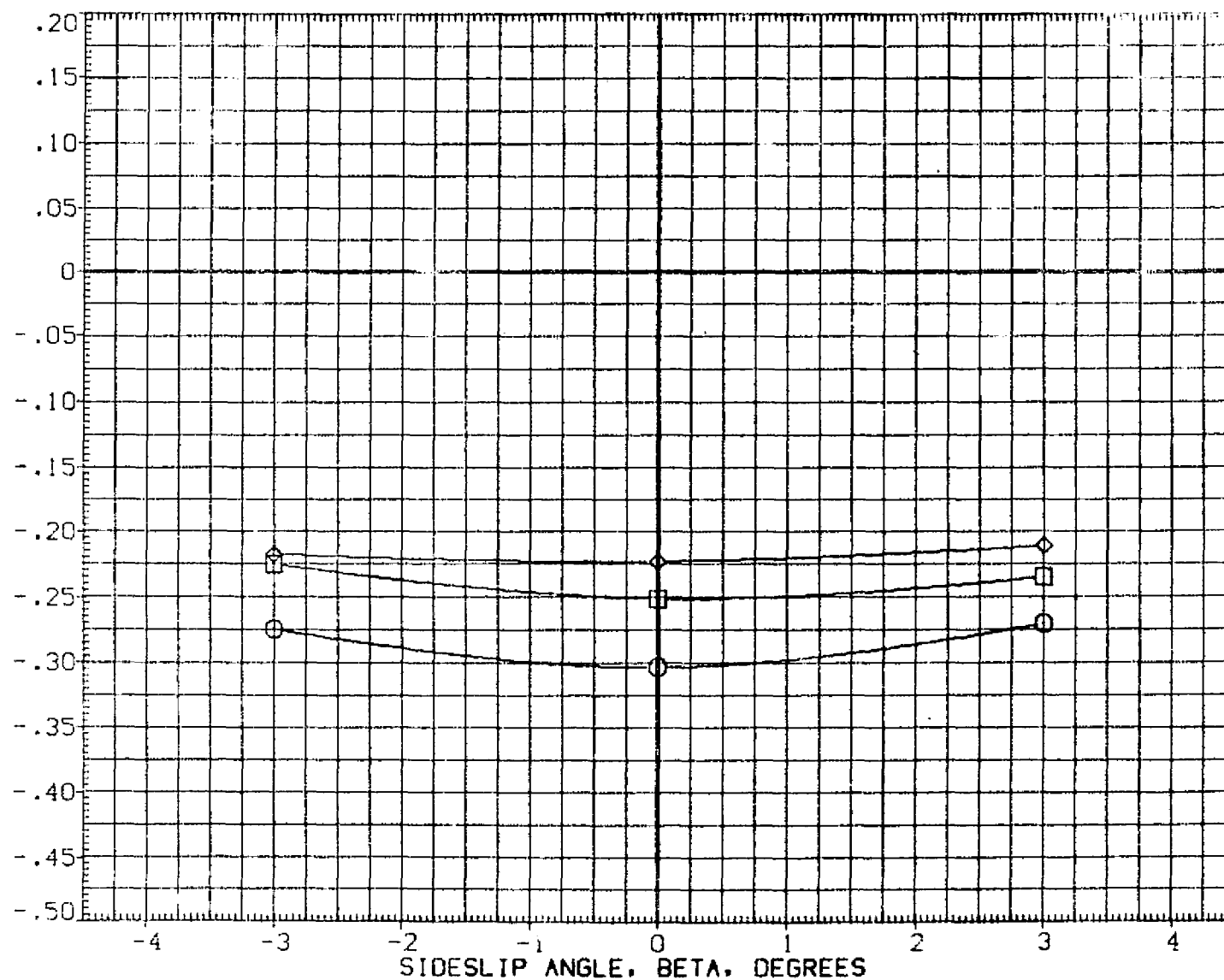


FIGURE 82. AMPLIFICATION FACTOR IN YAW, N79 JETS

SYMBOL	T/OA-I	MACH	PARAMETRIC VALUES		
○	47.500	10.330	ALPHA	-10.000	
□	95.000	BDCLAP	.000	T/OA	47.500
◇	190.000	W/L T	1.000	ELEVON	.000

REFERENCE INFORMATION		
SREF	2090.0000	Q. FT.
CREF	174.8000	POUNDS
WREF	936.6900	IN. IN.
MRP	1076.0000	IN. IN.
MRP	375.0000	IN. IN.
SCALE	1.000	

RCS JET AMPLIFICATION FACTOR - SIDE FORCE, N(SF)

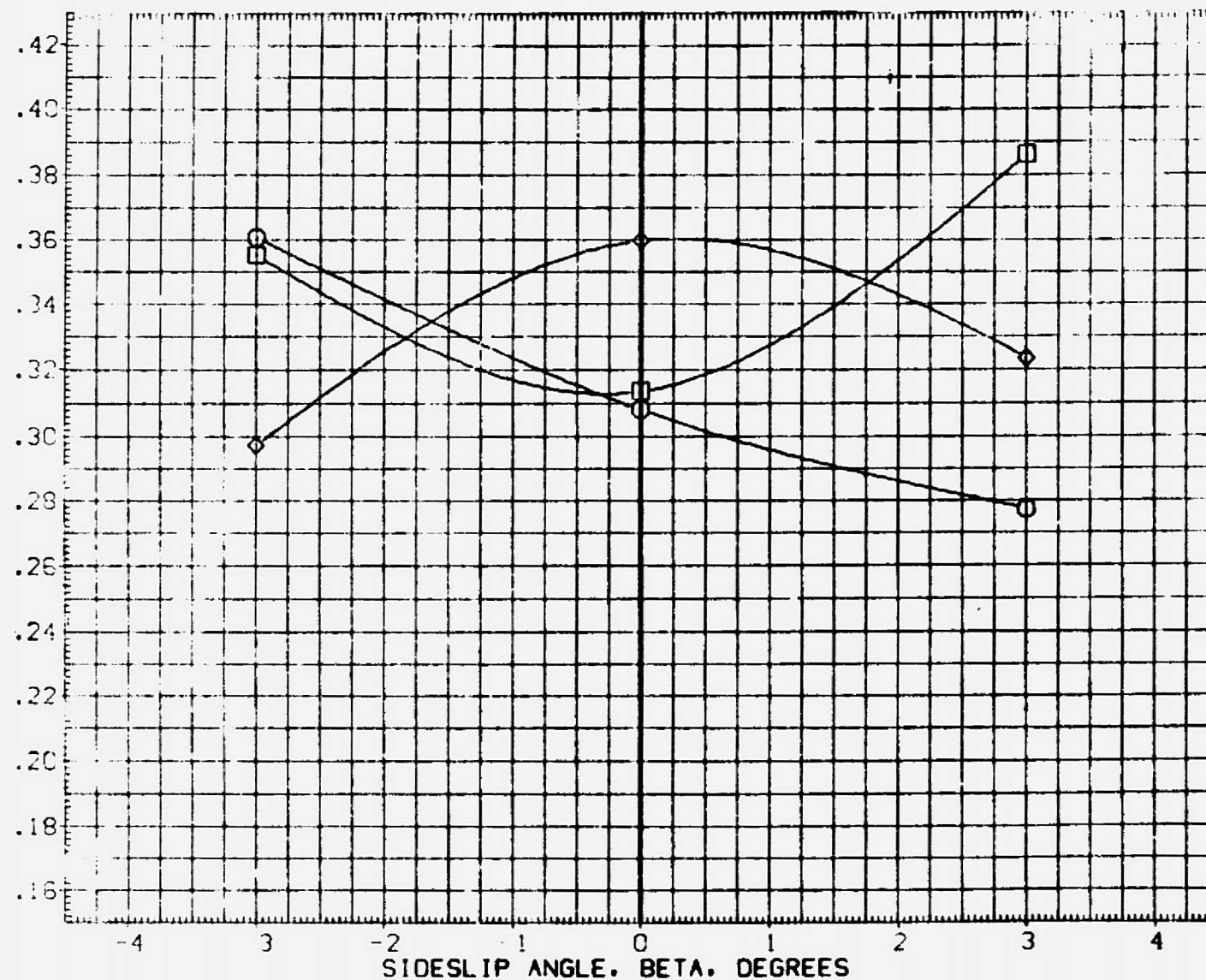


FIGURE 82. AMPLIFICATION FACTOR IN YAW, N79 JETS

C1N79

LARC CFHT 118 (MA-22)

(CJA187)

SYMBOL	T/OA-1	MACH	PARAMETRIC VALUES		
○	47.500		10.330	ALPHA	.000
□	95.000	BOFLAP	.000	T/OA	47.500
◇	190.000	NO.JET	1.000	ELEVON	.000

REFERENCE INFORMATION		
SREF	2690.0000	50.FT.
LREF	474.8000	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - SIDE FORCE. N(SF)

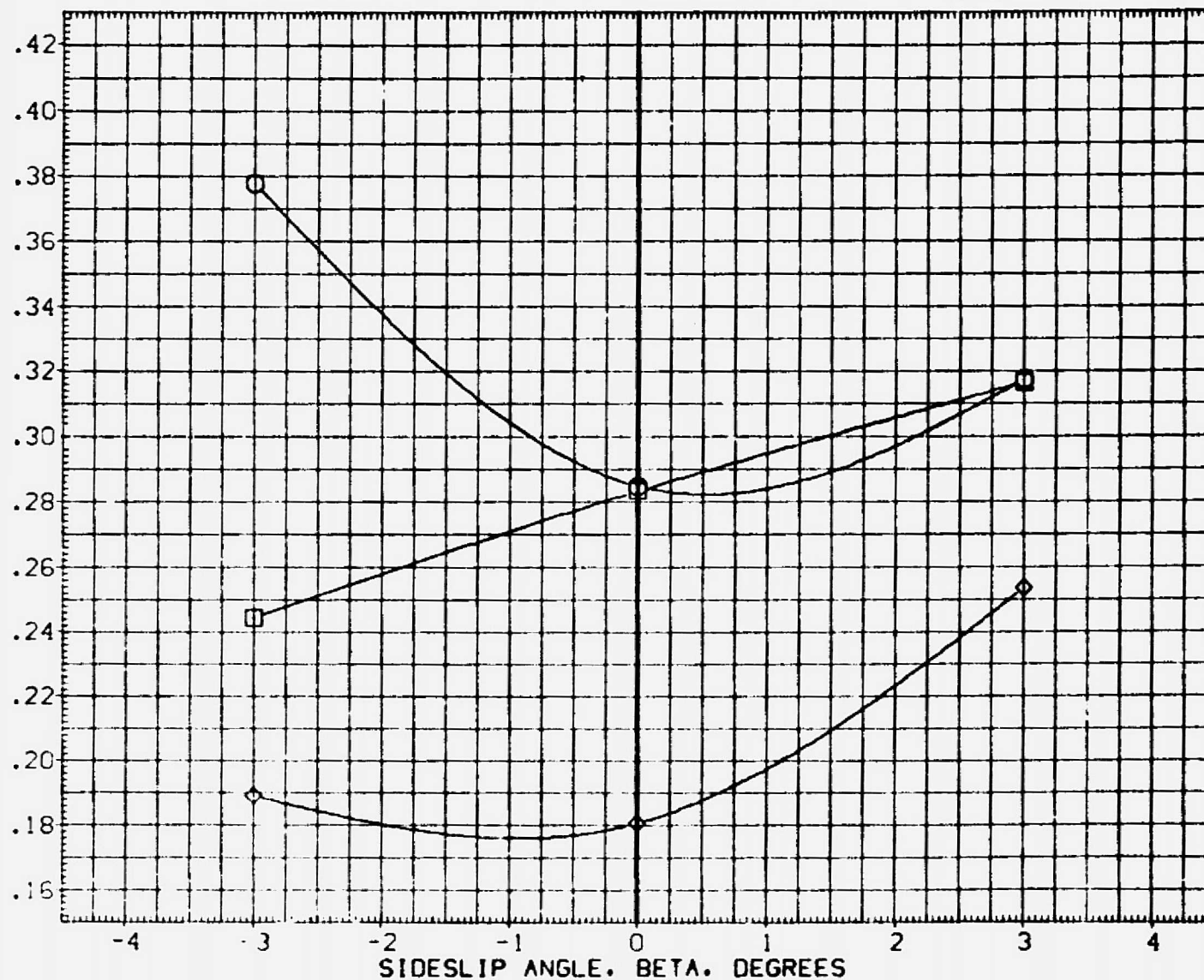


FIGURE 82. AMPLIFICATION FACTOR IN YAW, N79 JETS

SYMBOL



T/QA-1

47.500

MACH

BDFLAP

NO. JET

PARAMETRIC VALUES

10.330

ALPHA

T/QA

ELEVON

10.000

47.500

.000

REFERENCE INFORMATION

SREF

2690.0000

10.000

RE

474.8000

10.000

REV

936.6800

10.000

X

1076.7000

10.000

Y

.0000

10.000

Z

375.0000

10.000

SCALE

.0100

RCS JET AMPLIFICATION FACTOR - SIDE FORCE, N(SF)

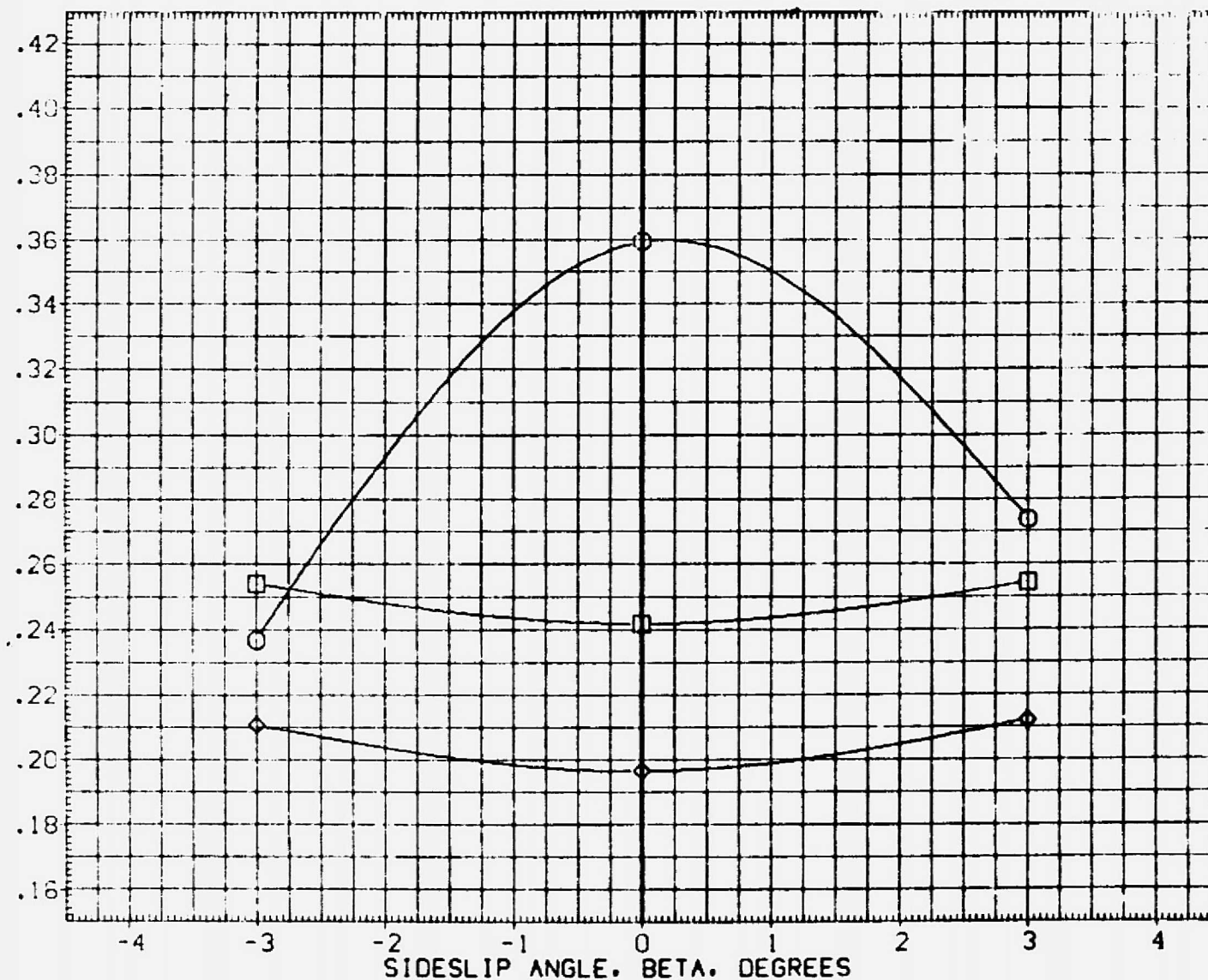


FIGURE 82. AMPLIFICATION FACTOR IN YAW, N79 JETS

01N79

LARC CFHT 116 (MA-22)

(CJA187)

SYMBOL	T/QA-1	PARAMETRIC VALUES
○	47.500	MACH 10.330 ALPHA 20.000
□	95.000	BOFLAP .000 T/QA 47.500
◇	190.000	NO.JET 1.000 ELEVON .000

REFERENCE INFORMATION	
SREF	2690.0000 SQ.FT.
LREF	474.8000 INCHES
BREF	936.6800 INCHES
XMRP	1076.7000 IN. X0
YMRP	.0000 IN. Y0
ZMRP	375.0000 IN. Z0
SCALE	.0100

RCS JET AMPLIFICATION FACTOR - SIDE FORCE, N(SF)

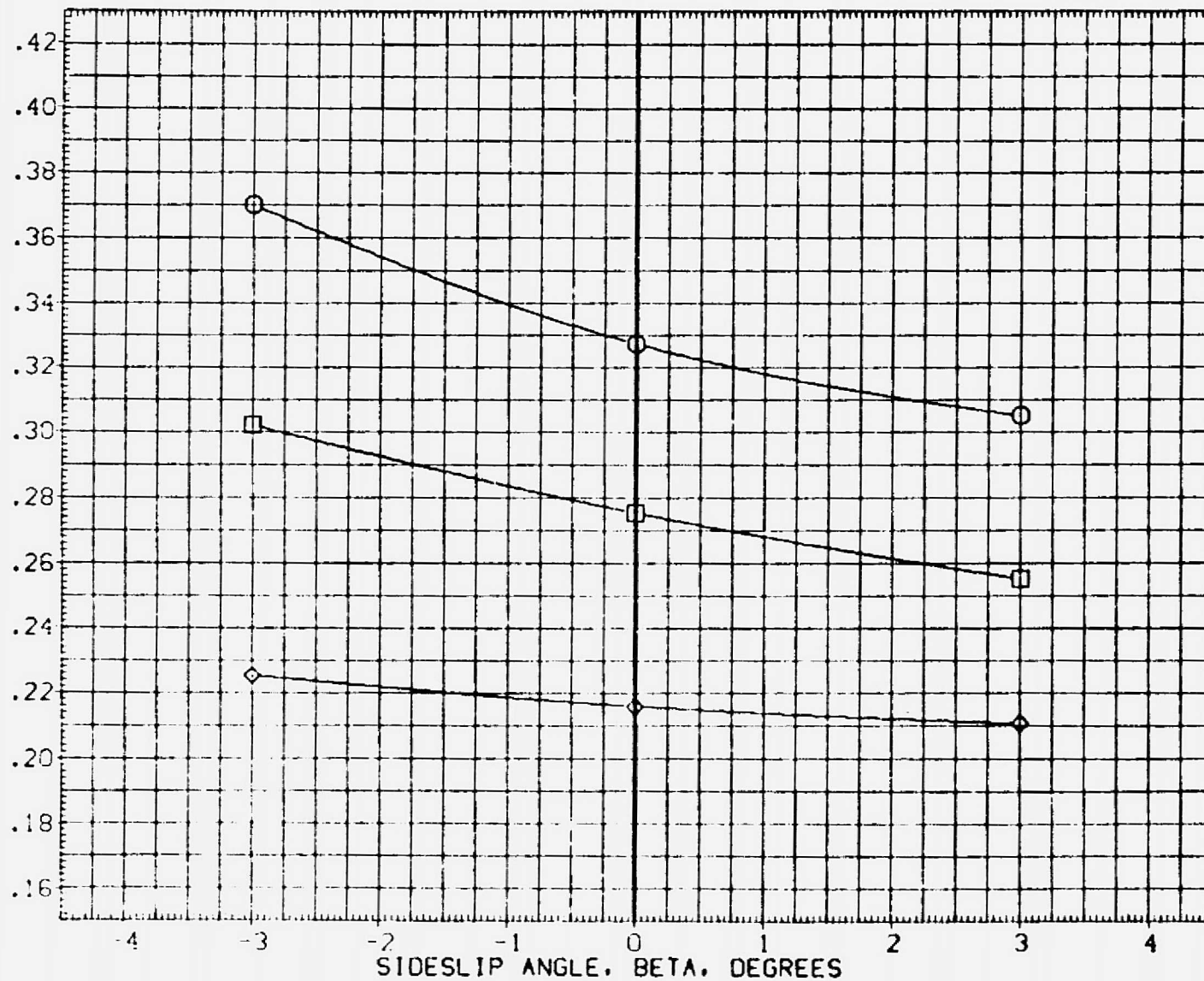


FIGURE 82. AMPLIFICATION FACTOR IN YAW, N79 JETS

SYMBOL	T/QA-1	PARAMETRIC VALUES
○	47.500	MACH 10.330 ALPHA 35.000
□	95.000	REFLAP .000 T/QA 47.500
◇	190.000	N79 1.000 ELEVON .000

REFERENCE INFORMATION		
SREF	2690.000	50. FT.
REF	474.8000	INCHES
REF	336.0000	INCHES
REF	1076.000	INCHES
REF	375.000	INCHES
SCALE	1000	

RCS JET AMPLIFICATION FACTOR - SIDE FORCE, N(SF)

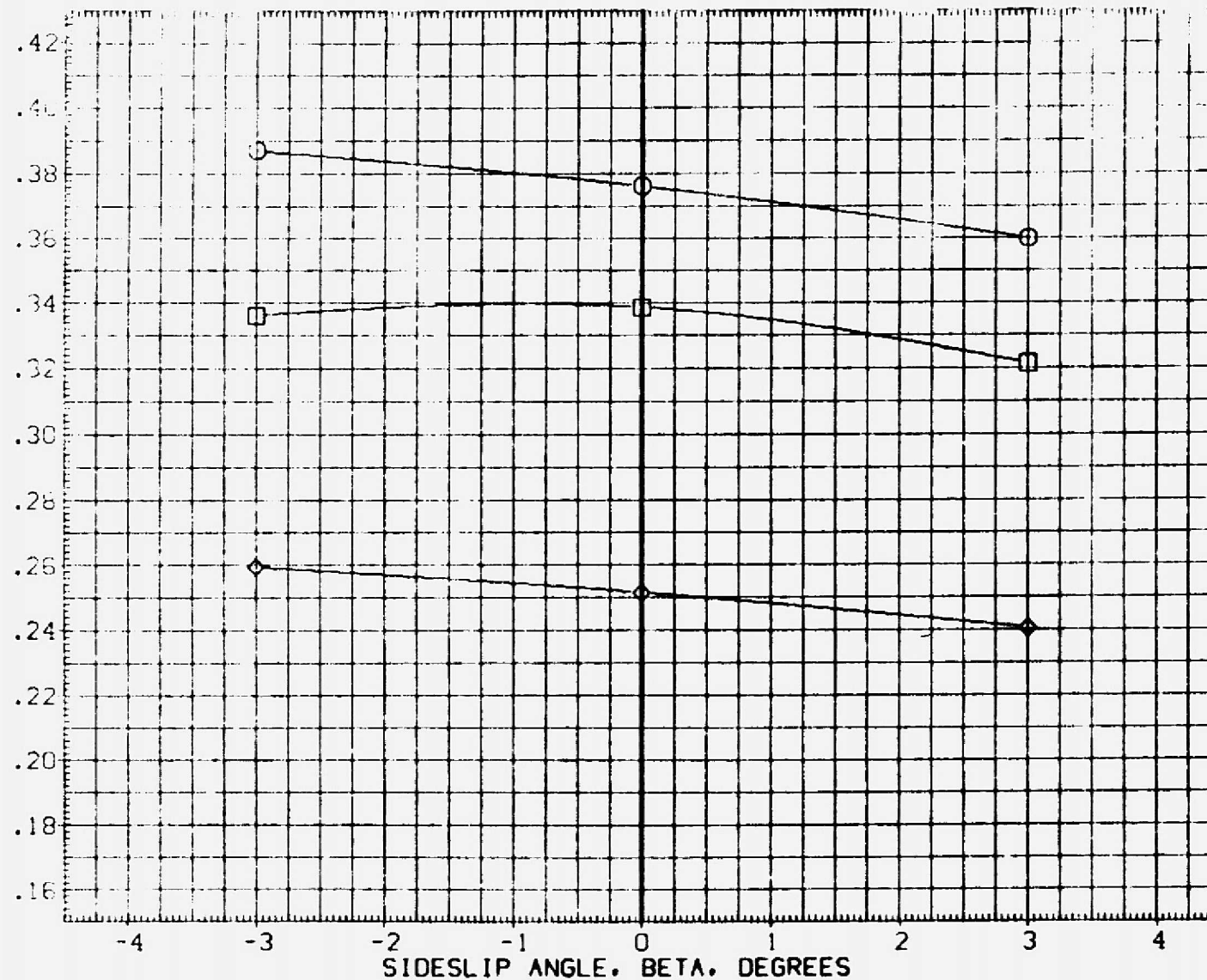


FIGURE 82. AMPLIFICATION FACTOR IN YAW, N79 JETS

01N49

LARC CFHT 118 (MA-22)

(CJA204)

SYMBOL	T/QA-1	PARAMETRIC VALUES
○	47.500	MACH 10.330 ALPHA -10.000
□	95.000	BDFLAP .000 T/QA 95.000
◇	190.000	NO.JET 2.000 ELEVON .000

REFERENCE INFORMATION		
SREF	2690.0000	50.FT.
LREF	474.8000	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - PITCH. N(PM)

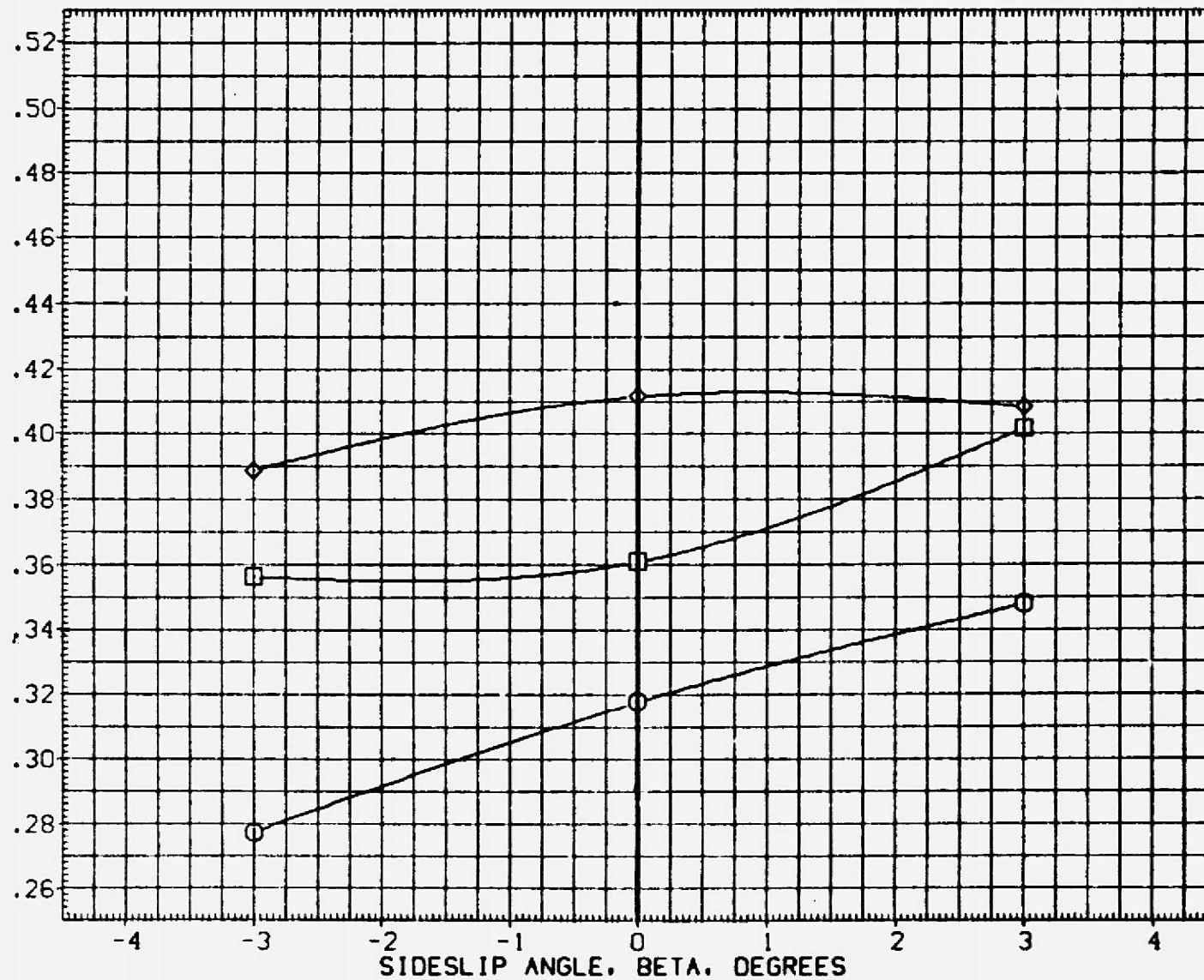


FIGURE 83. AMPLIFICATION FACTOR IN YAW, N49 JETS

SYMBOL	T/QA-1	MACH	PARAMETRIC VALUES	ALPHA	T/QA
○	47.500	95.000	10.330	.000	95.000
□	95.000	BDCLAP	.000		
◇	190.000	NOJET	2.000	ELEVON	.000

REFERENCE INFORMATION		
SREF	1590.0000	SQ. FT.
LREF	474.8000	INCHES
BREF	936.6800	INCHES
MRP	1076.7000	IN. X0
MRP	.0000	IN. Y0
MRP	375.0000	IN. Z0
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - PITCH, N(PM)

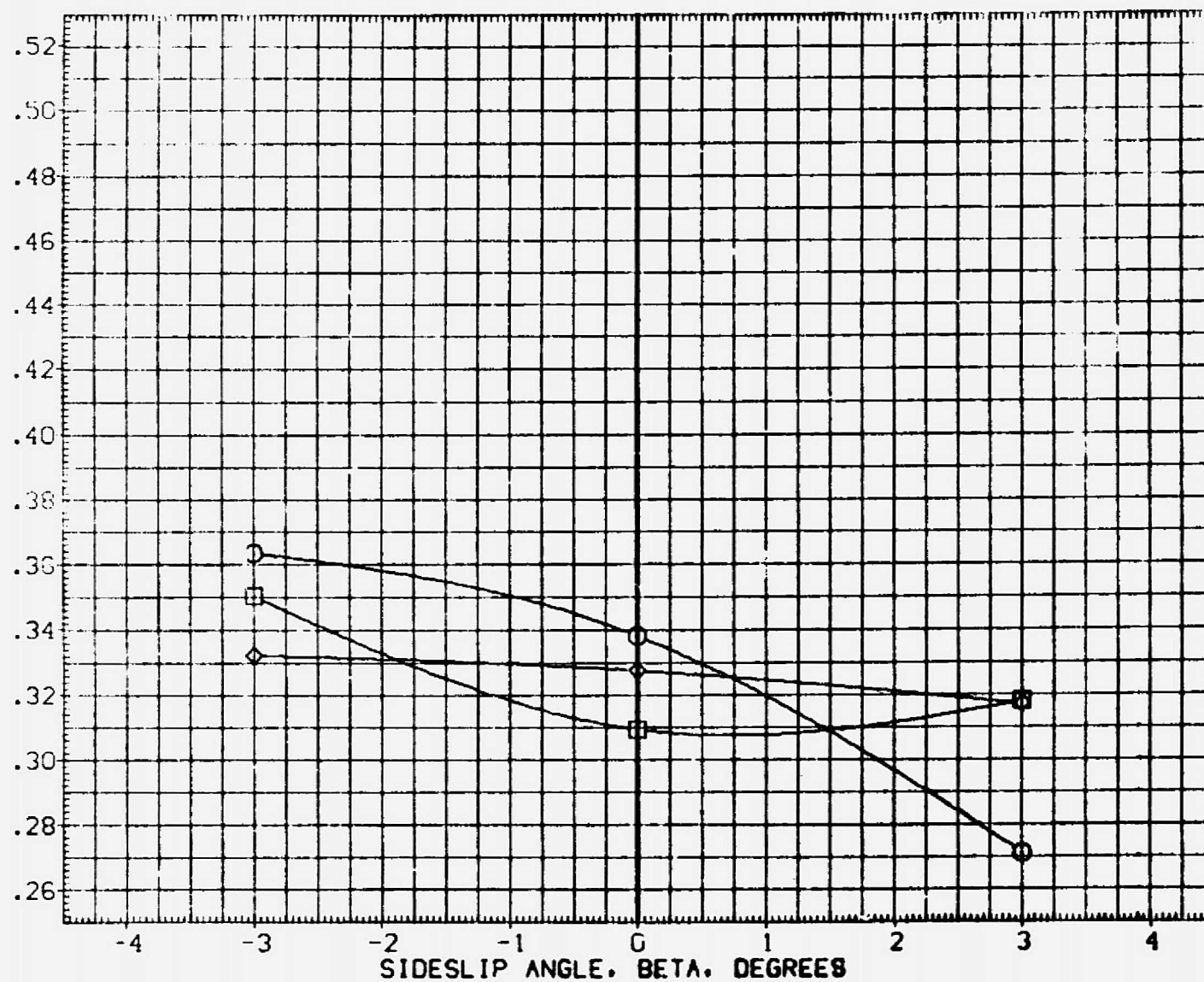


FIGURE 83. AMPLIFICATION FACTOR IN YAW, N49 JETS

01N49

LARC CFHT 118 (MA-22)

(CJA204)

SYMBOL	T/OA-1	PARAMETRIC VALUES			
○	47.500	MACH	10.330	ALPHA	10.000
□	95.000	BOFLAP	.000	T/OA	95.000
◇	190.000	NO.JET	2.000	ELEVON	.000

REFERENCE INFORMATION		
SREF	2690.0000	50.FT.
LREF	474.8000	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. X0
YMRP	.0300	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - PITCH. N(PM)

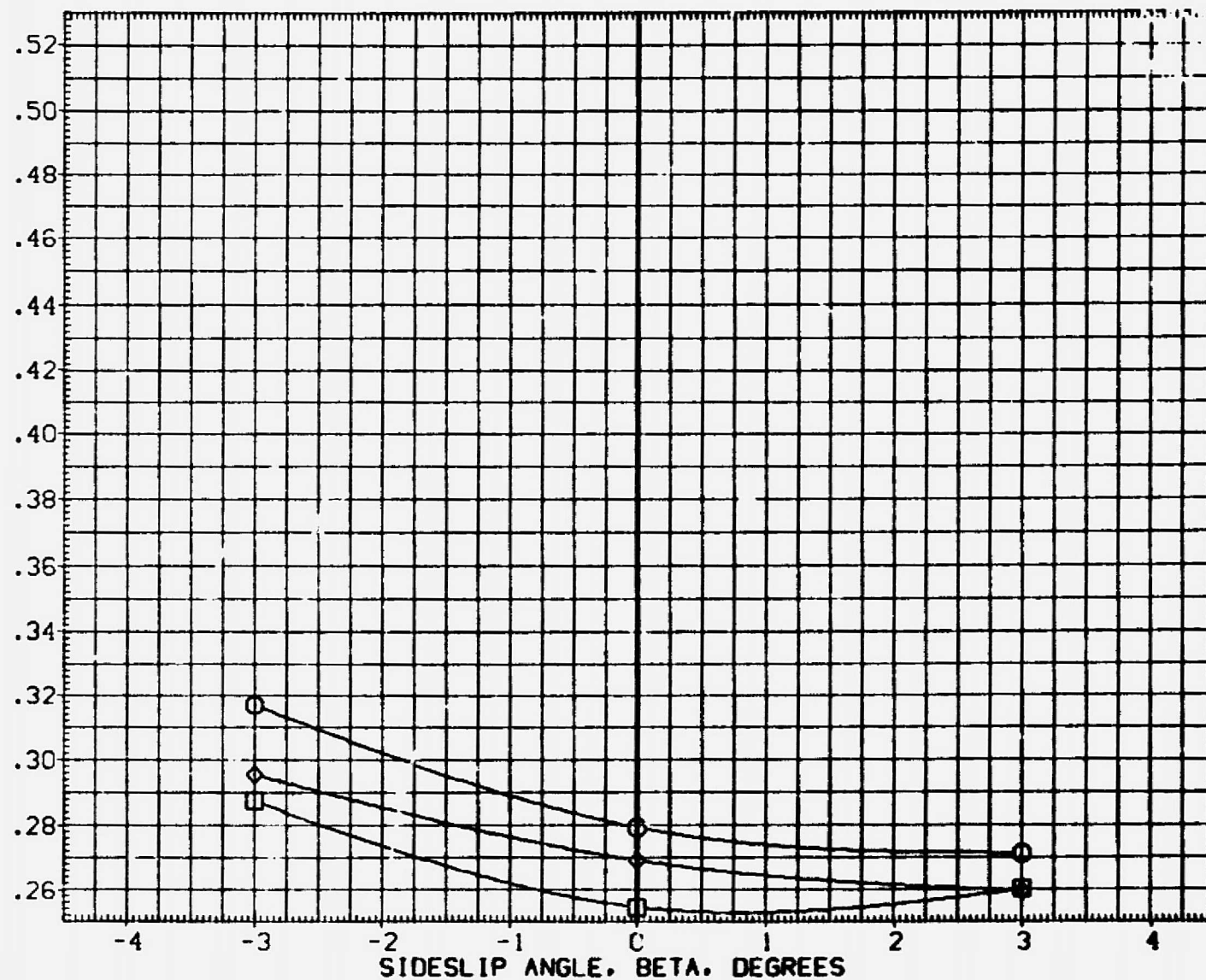


FIGURE 83. AMPLIFICATION FACTOR IN YAW, N49 JETS

SYMBOL	T/QA-1	PARAMETRIC VALUES			
○	47.500	MACH	10.330	ALPHA	20.000
□	95.000	BOSLAP	.000	T/QA	95.000
◇	190.000	NO. JET	2.000	ELEVON	.000

REFERENCE INFORMATION		
SREF	75.00000	50. FT.
LREF	174.8000	INCHES
BREF	105.6800	INCHES
XGRP	1076.7000	INCHES
YGRP	.0000	INCHES
ZGRP	375.0000	INCHES
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - PITCH, N(PM)

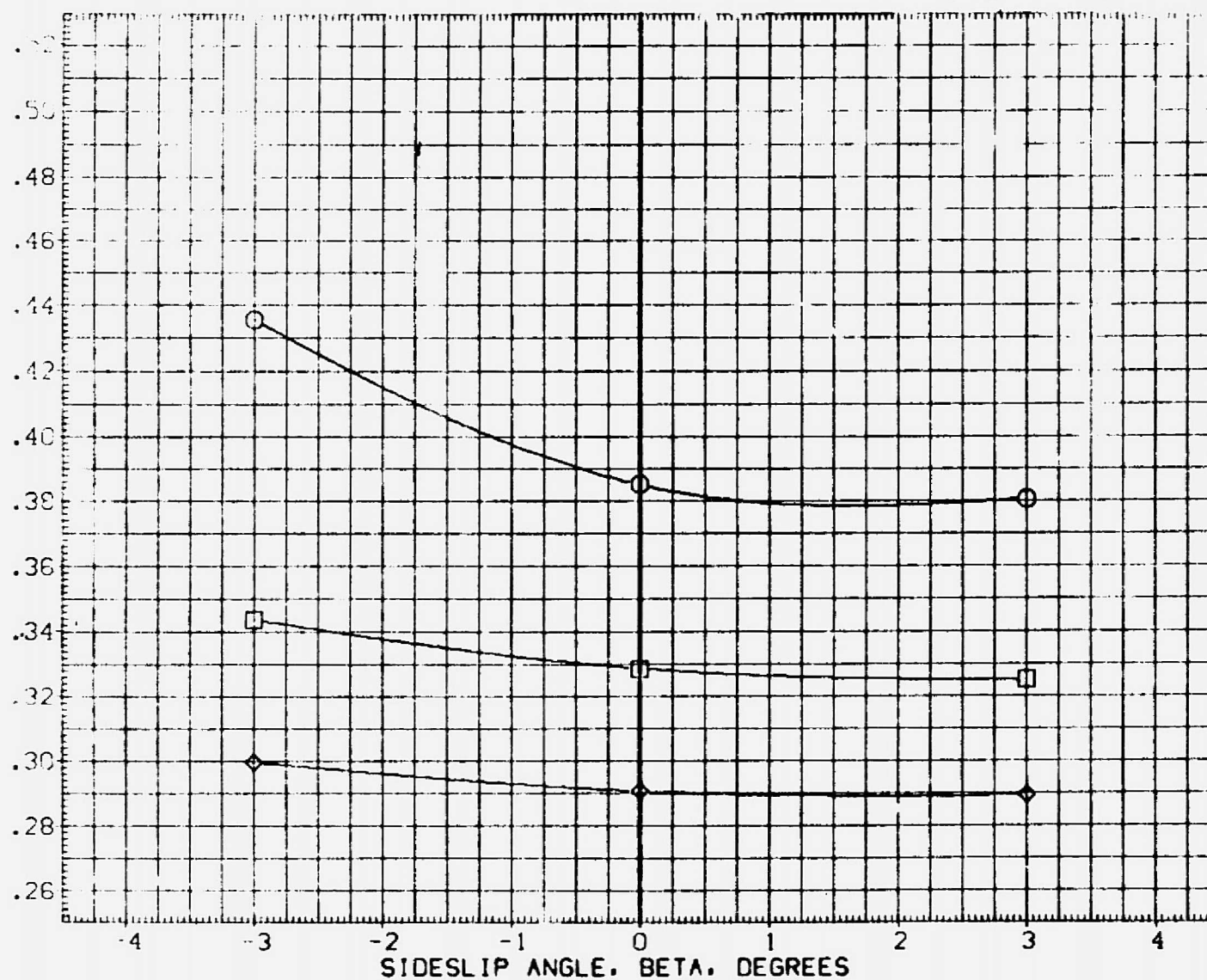


FIGURE 83. AMPLIFICATION FACTOR IN YAW, N49 JETS

01N49

LARC CEHT 118 (MA-22)

(CJA204)

SYMBOL

T/QA-1

PARAMETRIC VALUES

○

47.500

MACH

10.330

ALPHA

35.000

□

95.000

BDFLAP

.000

T/QA

95.000

◇

190.000

NO. JET

2.000

ELEVON

.000

REFERENCE INFORMATION

SREF

2690.0000

SQ. FT.

LREF

474.8000

INCHES

BREF

936.6800

INCHES

XMRP

1076.7000

IN. X0

YMRP

.0000

IN. Y0

ZMRP

375.0000

IN. Z0

SCALE

.0100

RCS JET AMPLIFICATION FACTOR - PITCH, N(PM)

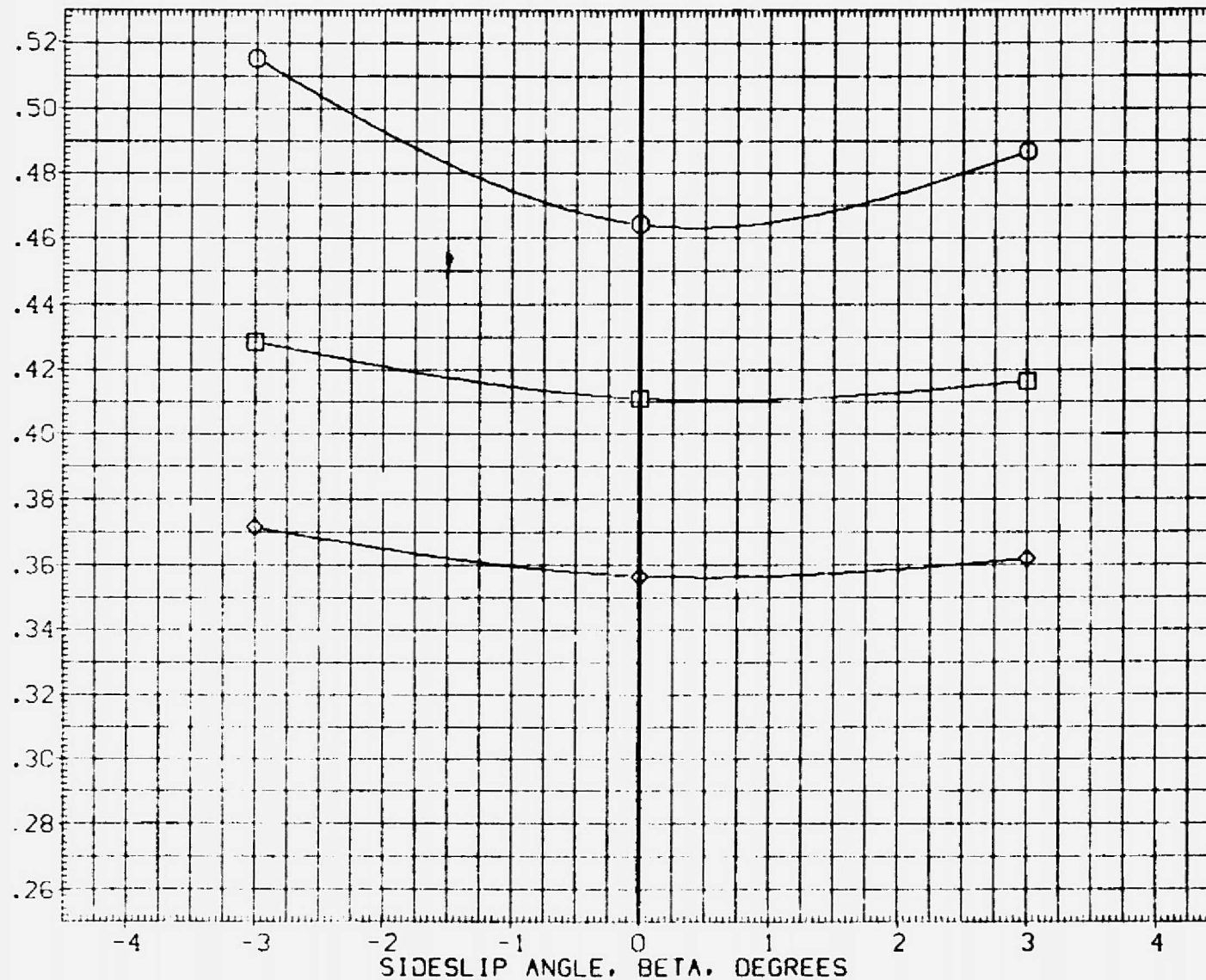


FIGURE 83. AMPLIFICATION FACTOR IN YAW, N49 JETS

SYMBOL

T/QA-1

○

47.500

MACH

PARAMETRIC VALUES

10.330

ALPHA

-10.000

□

95.000

BOFLIP

1.000

T/QA

95.000

◇

100.000

NO. 1

2.000

ELEVON

.000

REFERENCE INFORMATION

SREF 2690.0000

20.47

LREF 174.8000

1.000

BREF 936.6800

1.000

XMRP 1046.7000

1.000

YMRP .0000

1.000

ZMRP .0000

1.000

SCALE 1.0000

1.000

RCS JET AMPLIFICATION FACTOR - ROLL, NORM

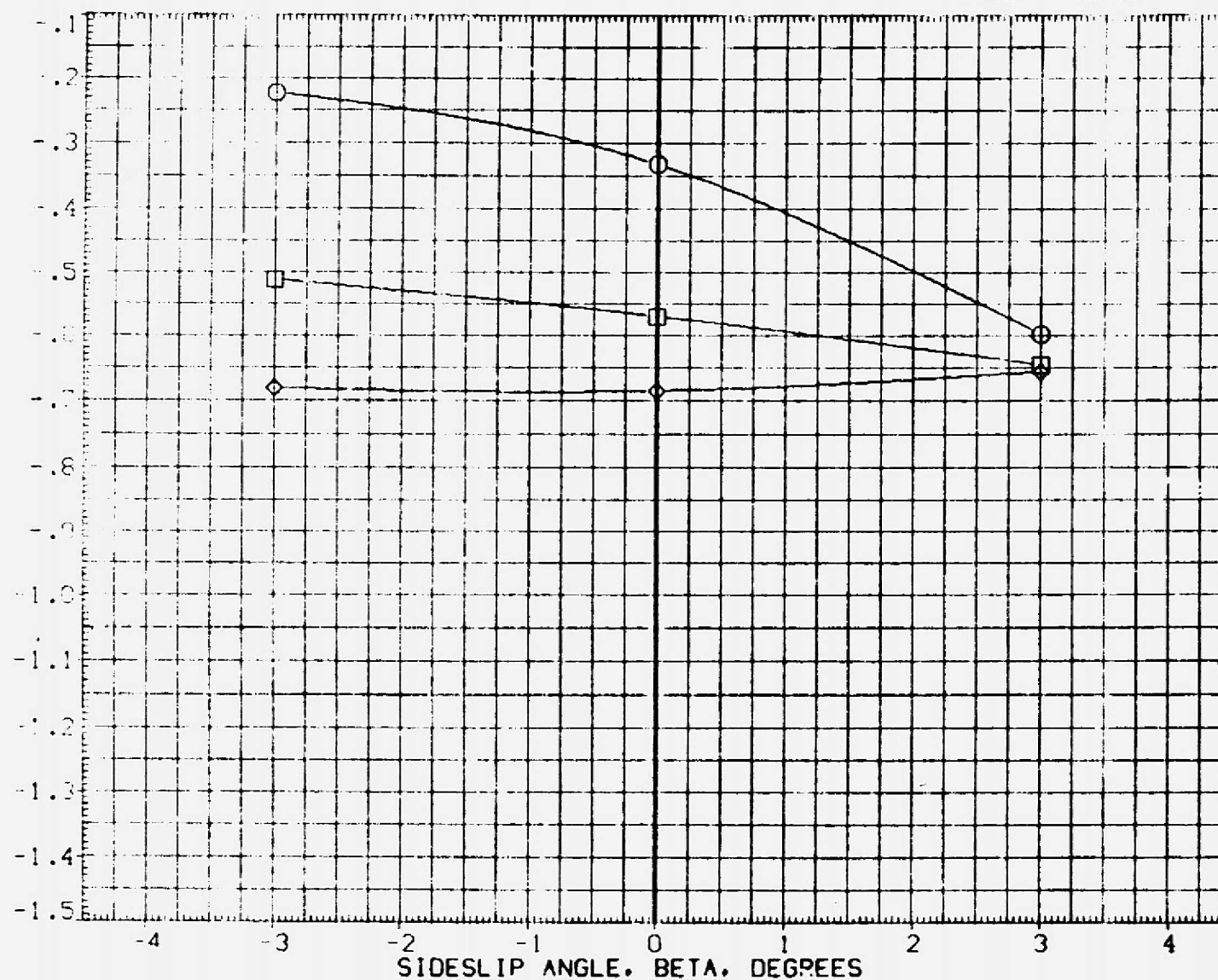


FIGURE 83. AMPLIFICATION FACTOR IN YAW, N49 JETS

01N49

LARC CFHT 118 (MA-22)

(CJA204)

SYMBOL	T/QA-1	PARAMETRIC VALUES			
○	47.500	MACH	10.330	ALPHA	.000
□	95.000	BOFLAP	.000	T/QA	95.000
◇	190.000	NO.JET	2.000	ELEVON	.000

REFERENCE INFORMATION	
SREF	2690.0000 SQ.FT.
LREF	474.8000 INCHES
BREF	936.6800 INCHES
XMRP	1076.7000 IN. X0
YMRP	.0000 IN. Y0
ZMRP	375.0000 IN. Z0
SCALE	.0100

RCS JET AMPLIFICATION FACTOR - ROLL, N(RM)

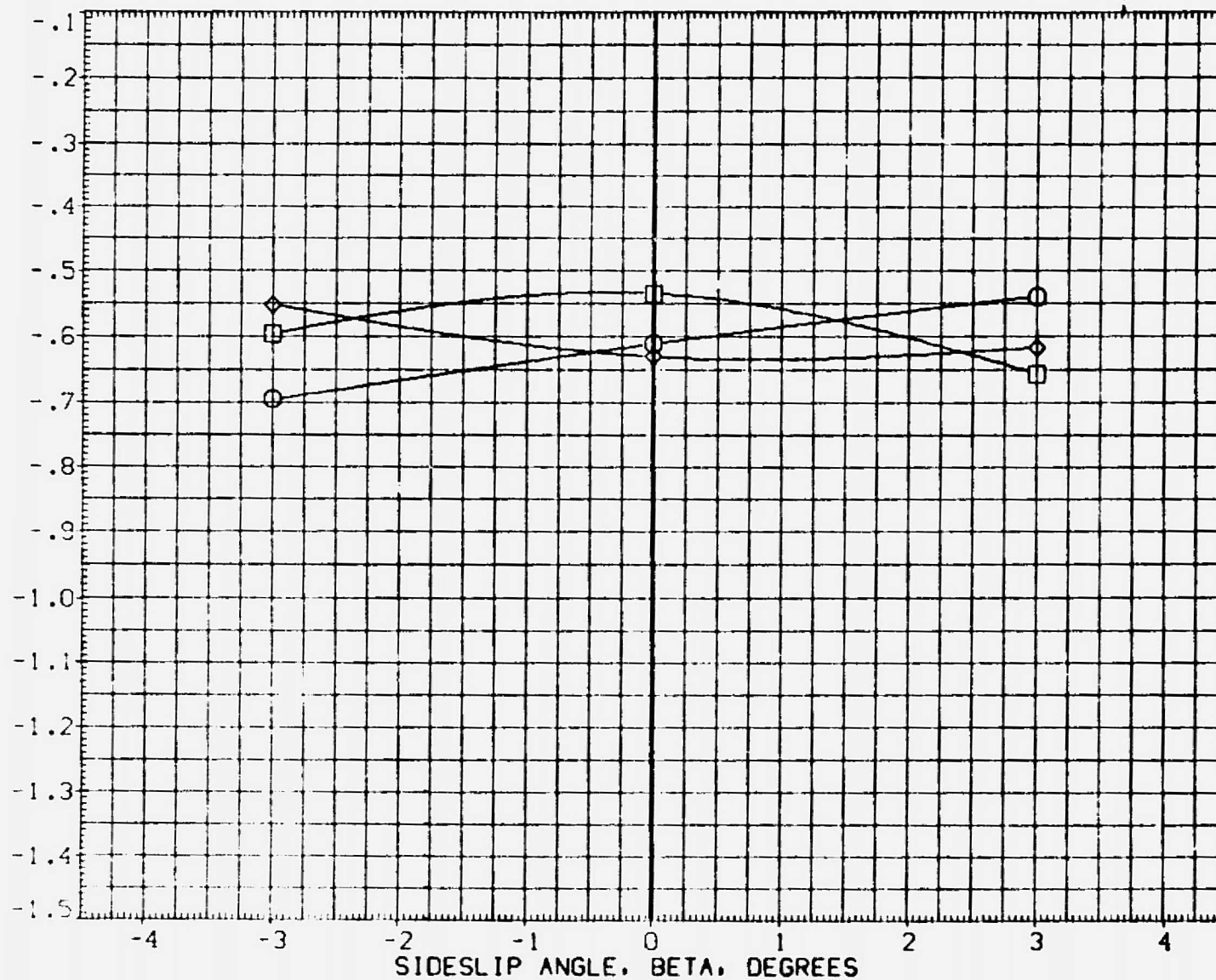


FIGURE 83. AMPLIFICATION FACTOR IN YAW, N49 JETS

SYMBOL

T/OA-1

PARAMETRIC VALUES

REFERENCE INFORMATION

○
□
◇47.500
95.000
190.000MACH
REFLAP
NO. OF10.330
.000
2.000ALPHA
T/OA
ELEVON10.000
95.000
.000SREF 2630.0000
LREF 474.8000
BREF 936.6800
XREF 1076.7000
YREF .0000
ZREF 375.0000
SCALE .010040.00
IN. 75
IN. 65
IN. 70
IN. 70

RCS JET AMPLIFICATION FACTOR - ROLL, N(RM)

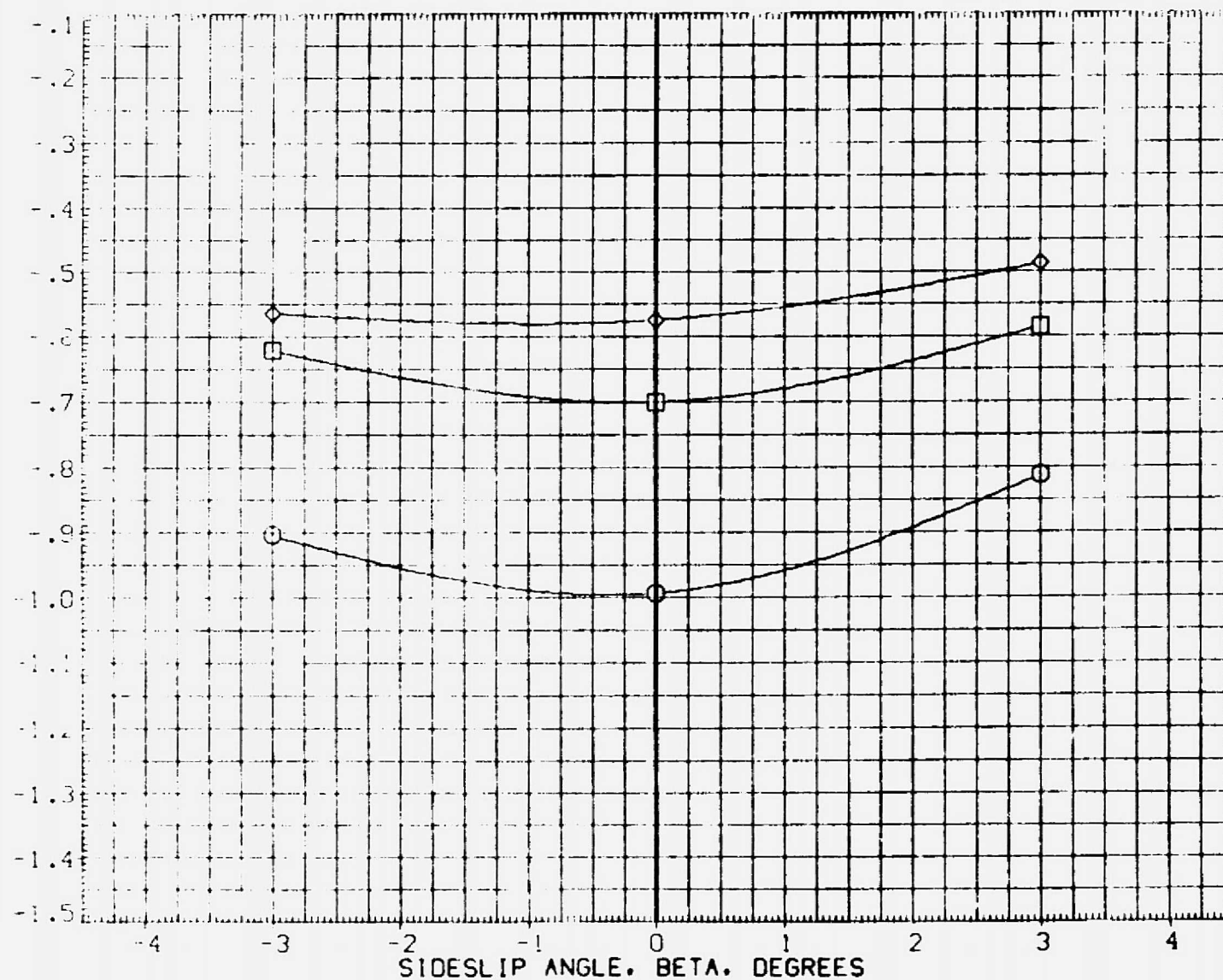


FIGURE 83. AMPLIFICATION FACTOR IN YAW, N49 JETS

01N49

1 ARC CENT 118 (MA-22)

(CJA204)

SYMBOL	T/QA-1	PARAMETRIC VALUES
○	47.500	MACH 10.330 ALPHA 20.000
□	95.000	BDFLAP .000 T/QA 95.000
◇	190.000	NO.JET 2.000 ELEVON .000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8000	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - ROLL. N(RM)

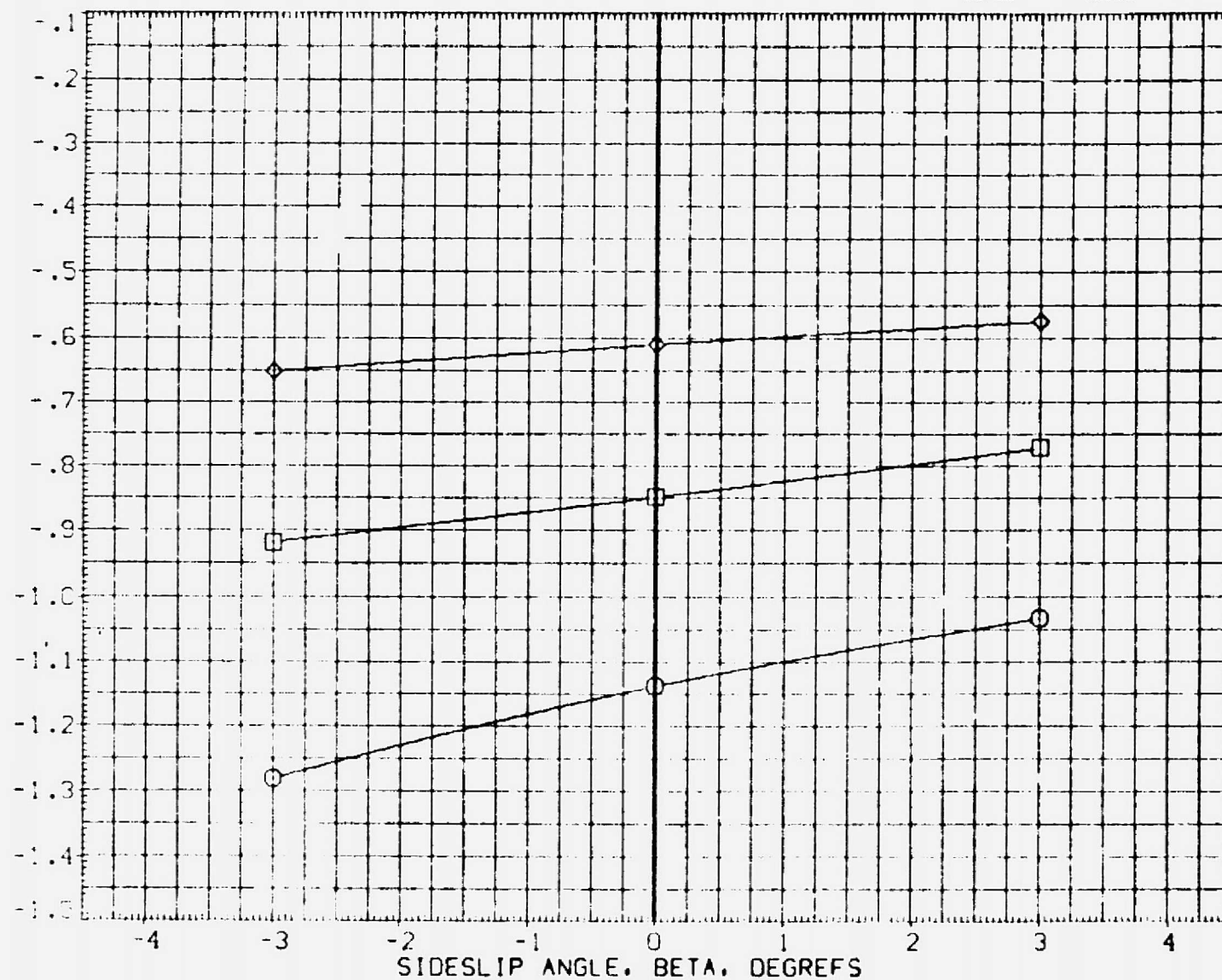


FIGURE 83. AMPLIFICATION FACTOR IN YAW, N49 JETS

SYMBOL	T/QA-1	PARAMETRIC VALUES
○	47.500	MACH 10.230 ALPHA 35.000
□	95.000	QDFLAP .000 T/QA 95.000
◇	190.000	NO. 21.000 ELEVON .000

REFERENCE INFORMATION	
SREF	1.0000 SQ. FT.
LREF	174.8000 INCHES
BREF	336.6800 INCHES
W	1076.7000 IN. X0
Y	.0000 IN. Y0
ZMRP	375.0000 IN. Z0
SCALE	.0100

RCS JET AMPLIFICATION FACTOR - ROLL, N(RM)

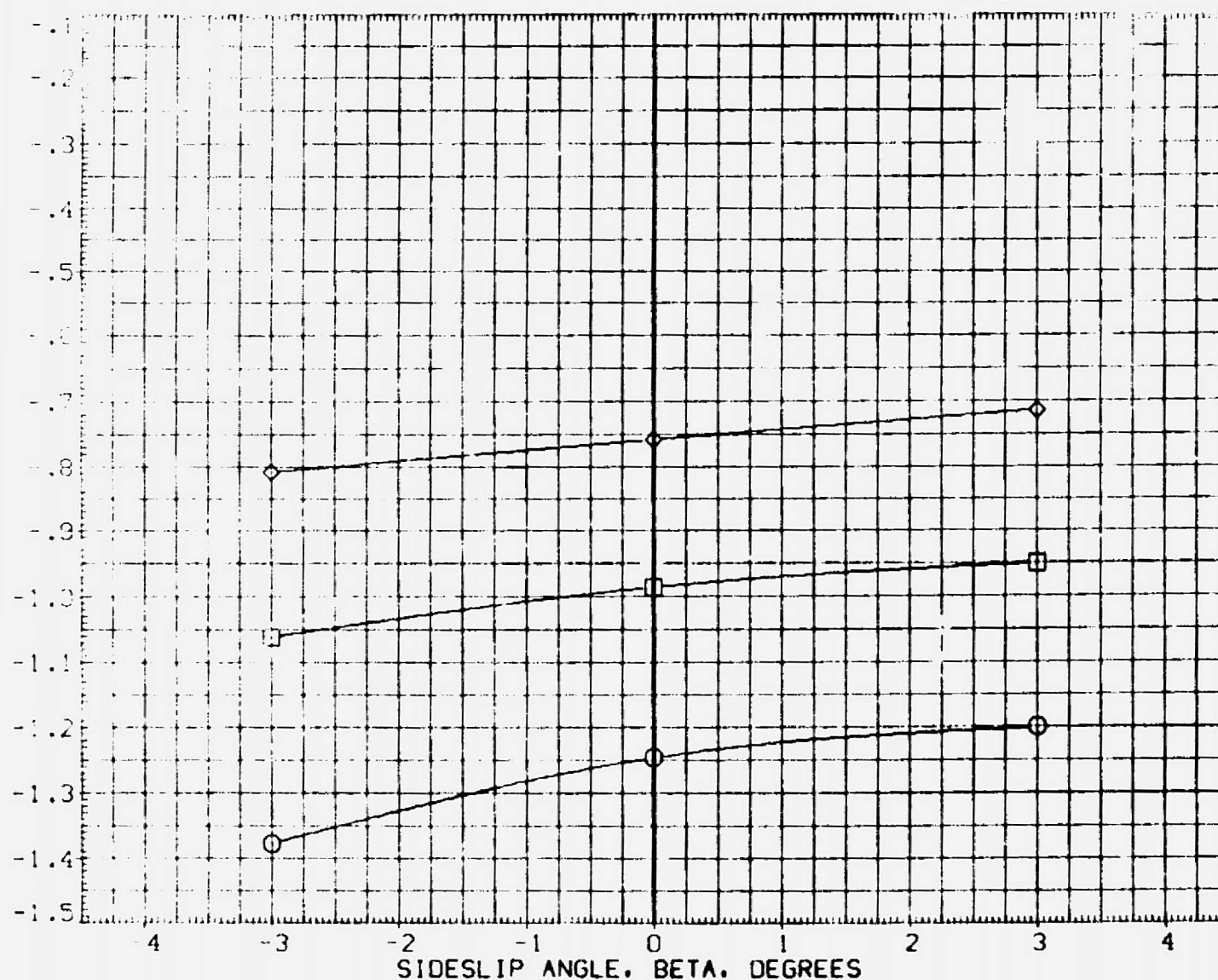


FIGURE 83. AMPLIFICATION FACTOR IN YAW, N49 JETS

01N49

LARC CFHT 118 (MA-22)

(CJA204)

SYMBOL

T/QA-1

PARAMETRIC VALUES

○

47.500

MACH

10.330

ALPHA

-10.000

□

95.000

BOFLAP

.000

T/QA

95.000

◇

100.000

NO.JET

2.000

ELEVON

.000

REFERENCE INFORMATION

SREF

2690.0000

SQ.FT.

LREF

474.8000

INCHES

BREF

936.6800

INCHES

XMRP

1076.7000

IN. X0

YMRP

.0000

IN. Y0

ZMRP

375.0000

IN. Z0

SCALE

.0100

RCS JET AMPLIFICATION FACTOR - YAW, N(YM)

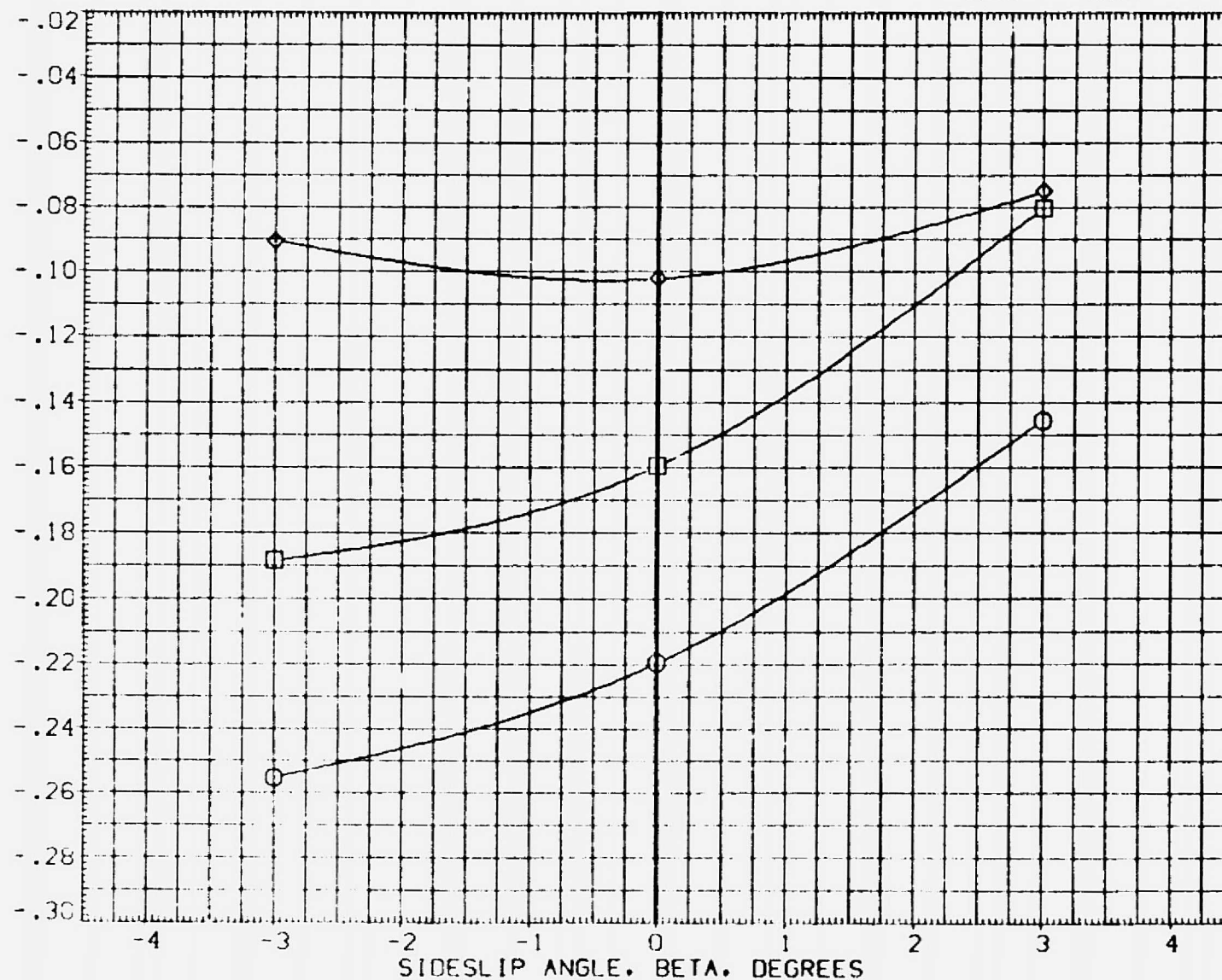


FIGURE 83. AMPLIFICATION FACTOR IN YAW, N49 JETS

01N40

LARC CPHIT 116 (MA 22)

(CJA204)

SYMBOL

○
□
◇

T/QA-1

47.500
95.000
190.000

MACH

BDFLAP
N2 JET

PARAMETRIC VALUES

10.330
.000
2.000

ALPHA

T/QA
ELEVON.000
95.000
.000

REFERENCE INFORMATION

SREF	2690.0000	10.0 FT.
LREF	474.8000	10.0 FT.
BREF	306.6800	10.0 FT.
WREF	10.6.7000	10.0 FT.
SCALE	1/5.0000	10.0 FT.

RCS JET AMPLIFICATION FACTOR - YAW, N(YM)

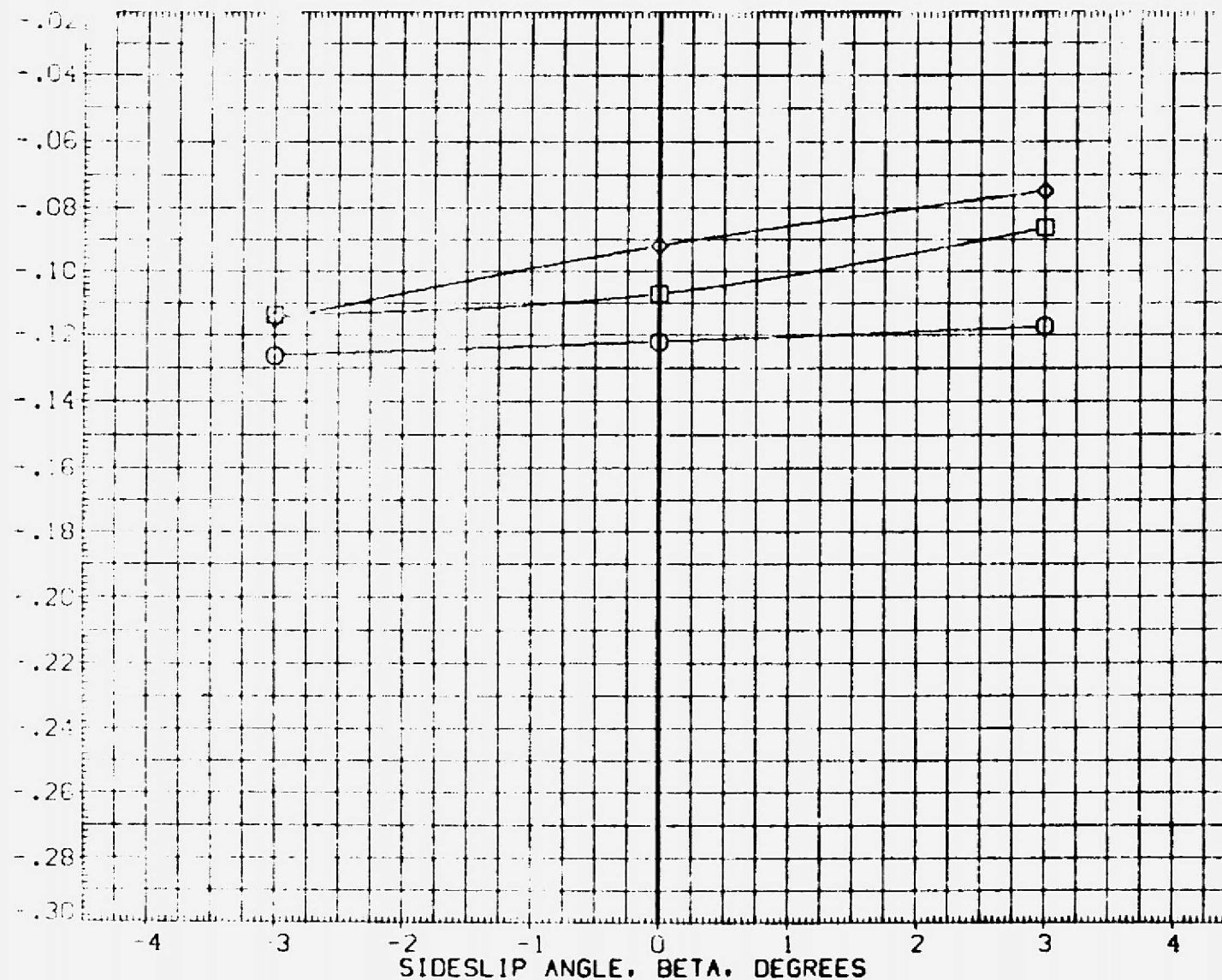


FIGURE 83. AMPLIFICATION FACTOR IN YAW, N49 JETS

01N49

LARC CEHT 118 (MA-22)

(CJA204)

SYMBOL	T/OA-1	MACH	PARAMETRIC VALUES		
○	47.500		10.330	ALPHA	10.000
□	95.000	BDFLAP	.000	T/OA	95.000
◇	190.000	NO.JET	2.000	ELEVON	.000

REFERENCE INFORMATION		
SREF	2690.0000	50. FT.
LREF	474.8000	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - YAW, N(YM)

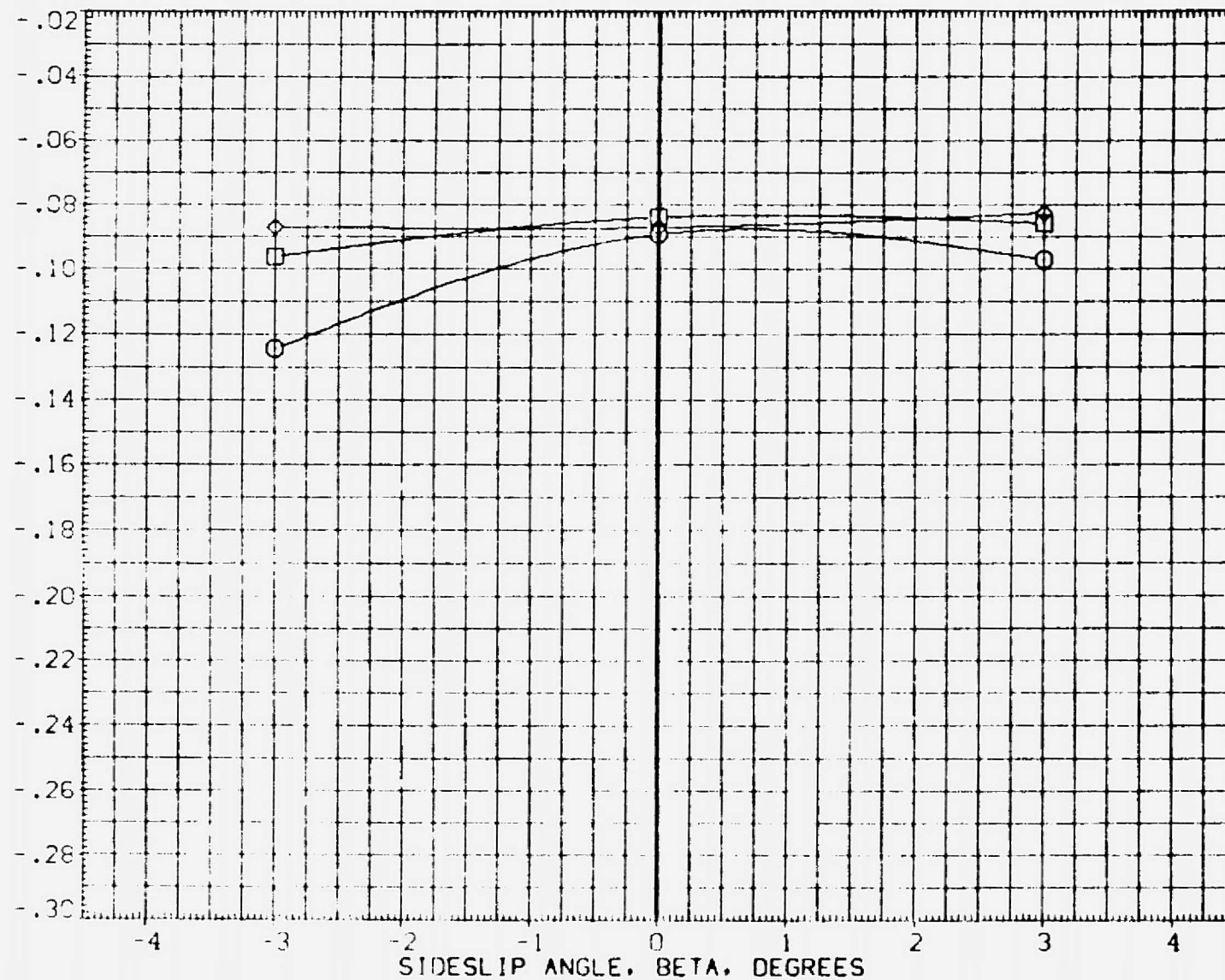


FIGURE 83. AMPLIFICATION FACTOR IN YAW, N49 JETS

01N49

LARC CFHT 118 (HA-22)

(CJA204)

SYMBOL

T/QA-1

MACH

PARAMETRIC VALUES

10.330

ALPHA

20.000

○

47.500

BOFLAP

.000

T/QA

95.000

□

95.000

NO.2FT

2.000

ELEVON

.000

◇

190.000

REFERENCE INFORMATION

SRFF

1000.0000

REF.

LIFT

174.8000

LIFT

EM

336.6800

EM

XCP

1076.7000

XCP

YCP

100.0000

YCP

ZCP

375.0000

ZCP

SCALE

.0100

RCS JET AMPLIFICATION FACTOR - YAW, N(YM)

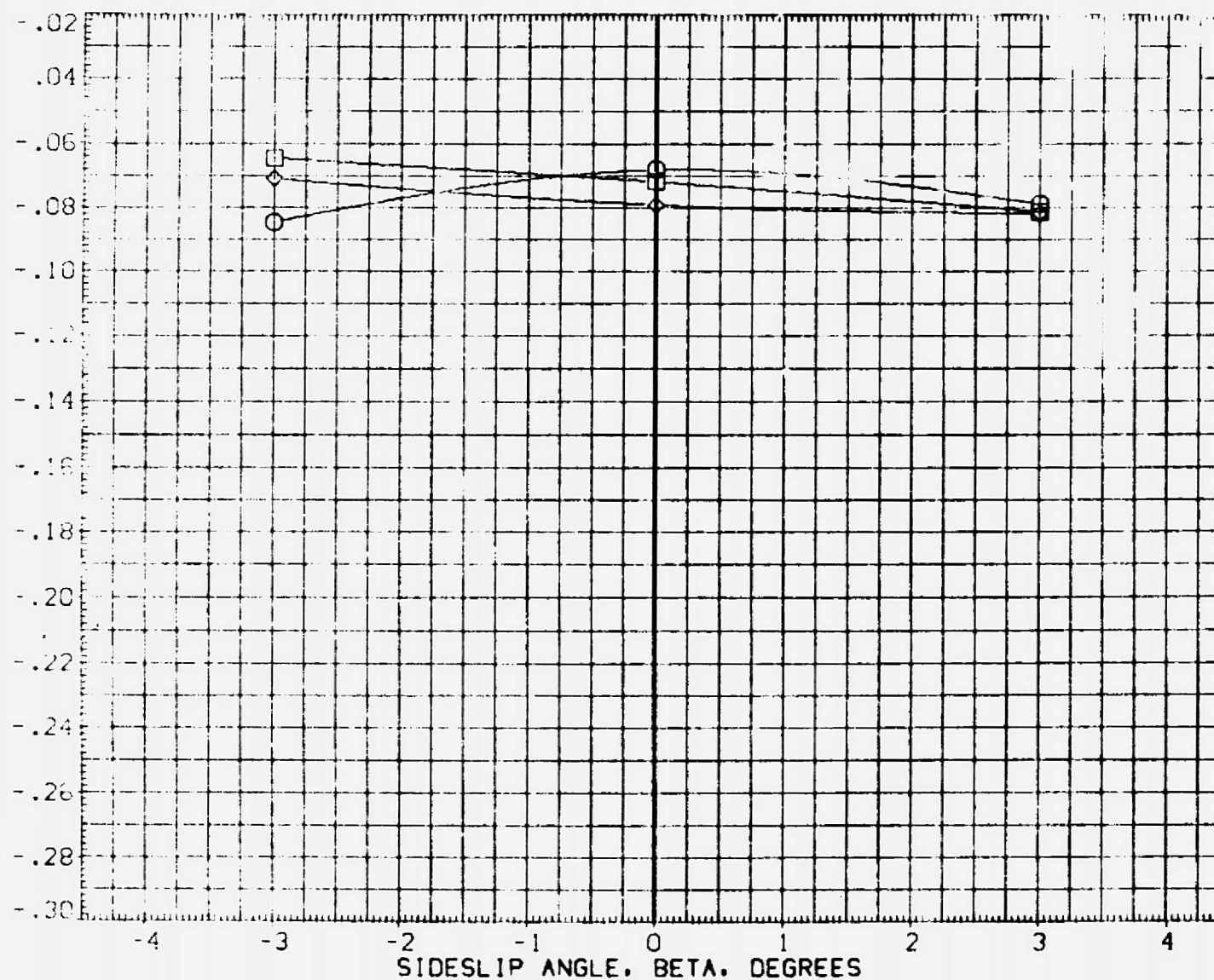
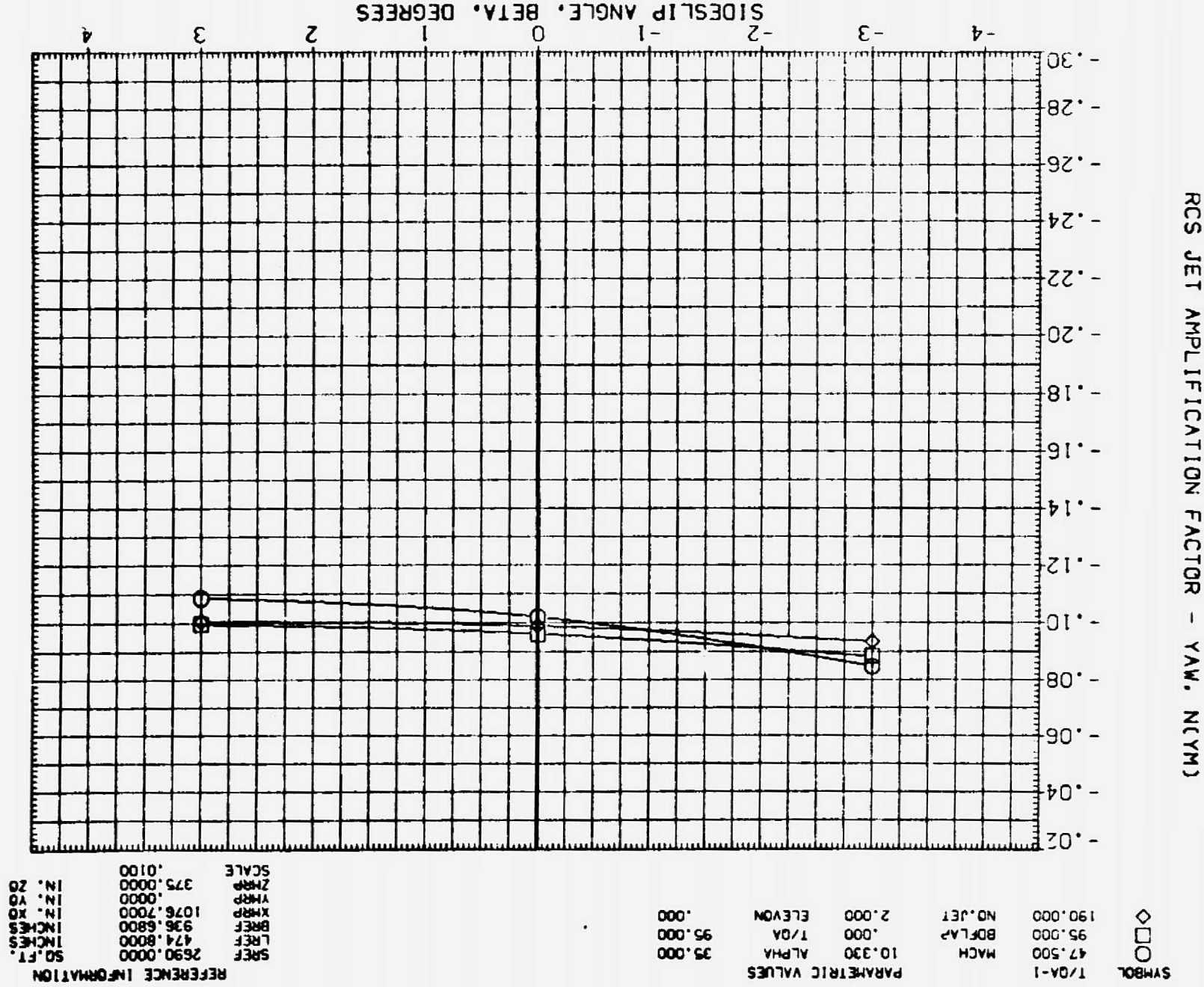


FIGURE 83. AMPLIFICATION FACTOR IN YAW, N49 JETS

FIGURE 83. AMPLIFICATION FACTOR IN YAW, N49 JETS



(CJA204)

LARC CTR 118 (MA 22)

Q149

SYMBOL

○
□
◇

T/OA-1

47.500

MACH

80FLAP

NO. NET

PARAMETRIC VALUES

10.330

ALPHA

T/OA

ELEVON

-10.000

95.000

.000

REFERENCE INFORMATION

SREF 2690.0000

LREF 414.8000

BREF 91.6800

XMRP 1075.7000

YMRP .0000

ZMRP 375.0000

SCALE .0100

IN. FT.

INCHES

IN. 10

IN. 20

RCS JET AMPLIFICATION FACTOR - NORMAL FORCE, N(NF)

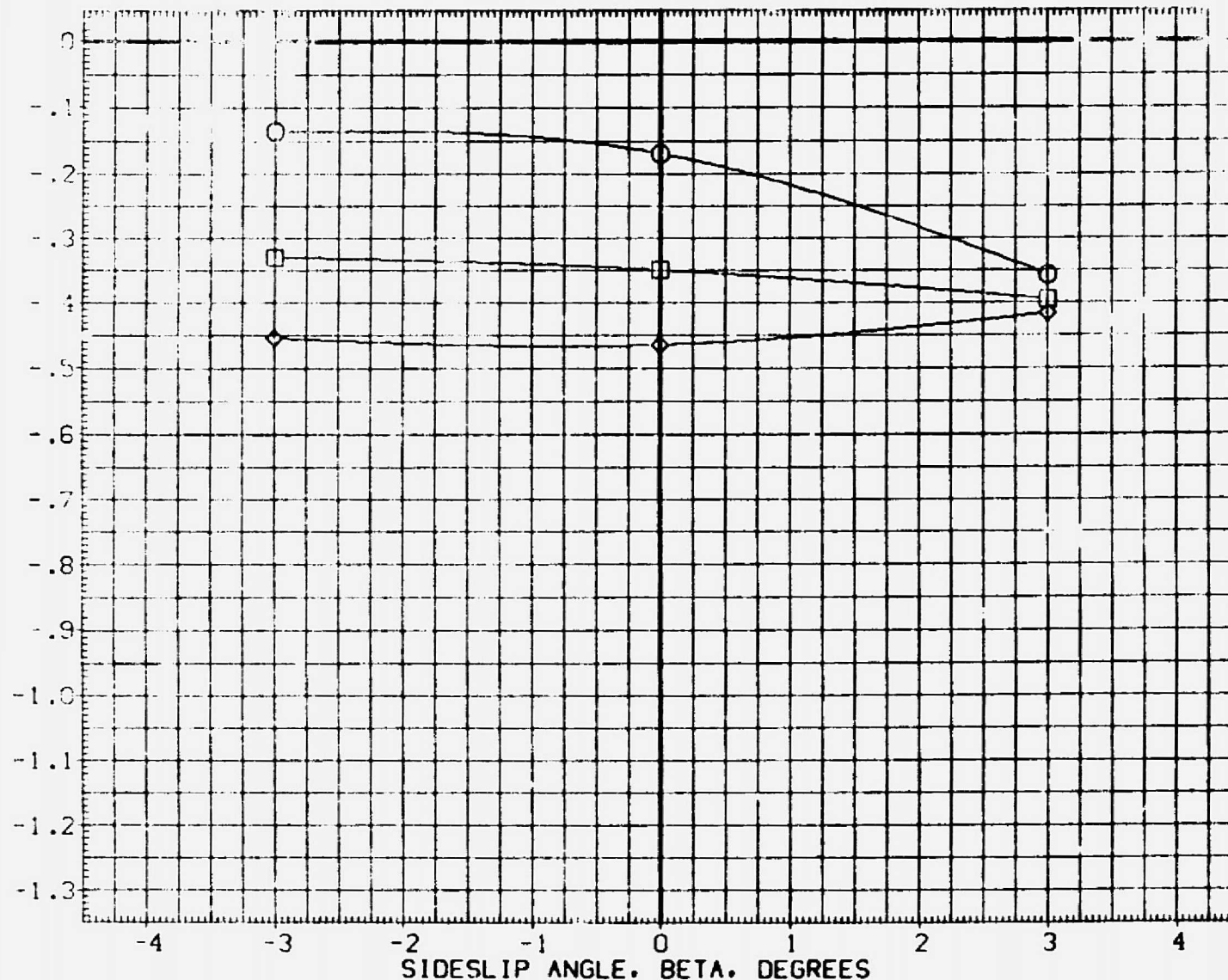


FIGURE 83. AMPLIFICATION FACTOR IN YAW, N49 JETS

01N49

LARC CFHT 118 (MA-22)

(CJA204)

SYMBOL

T/QA-1

PARAMETRIC VALUES

○

47.500

MACH

10.330

ALPHA

.000

□

95.000

BOFLAP

.000

T/QA

95.000

◇

190.000

NO.JET

2.000

ELEVON

.000

REFERENCE INFORMATION

SREF 2690.0000

Sq.FT.

LREF 474.8000

INCHES

BREF 936.6800

INCHES

XMRP 1076.7000

IN. X0

YMRP .0000

IN. Y0

ZMRP 375.0000

IN. Z0

SCALE .0100

RCS JET AMPLIFICATION FACTOR - NORMAL FORCE, N(NF)

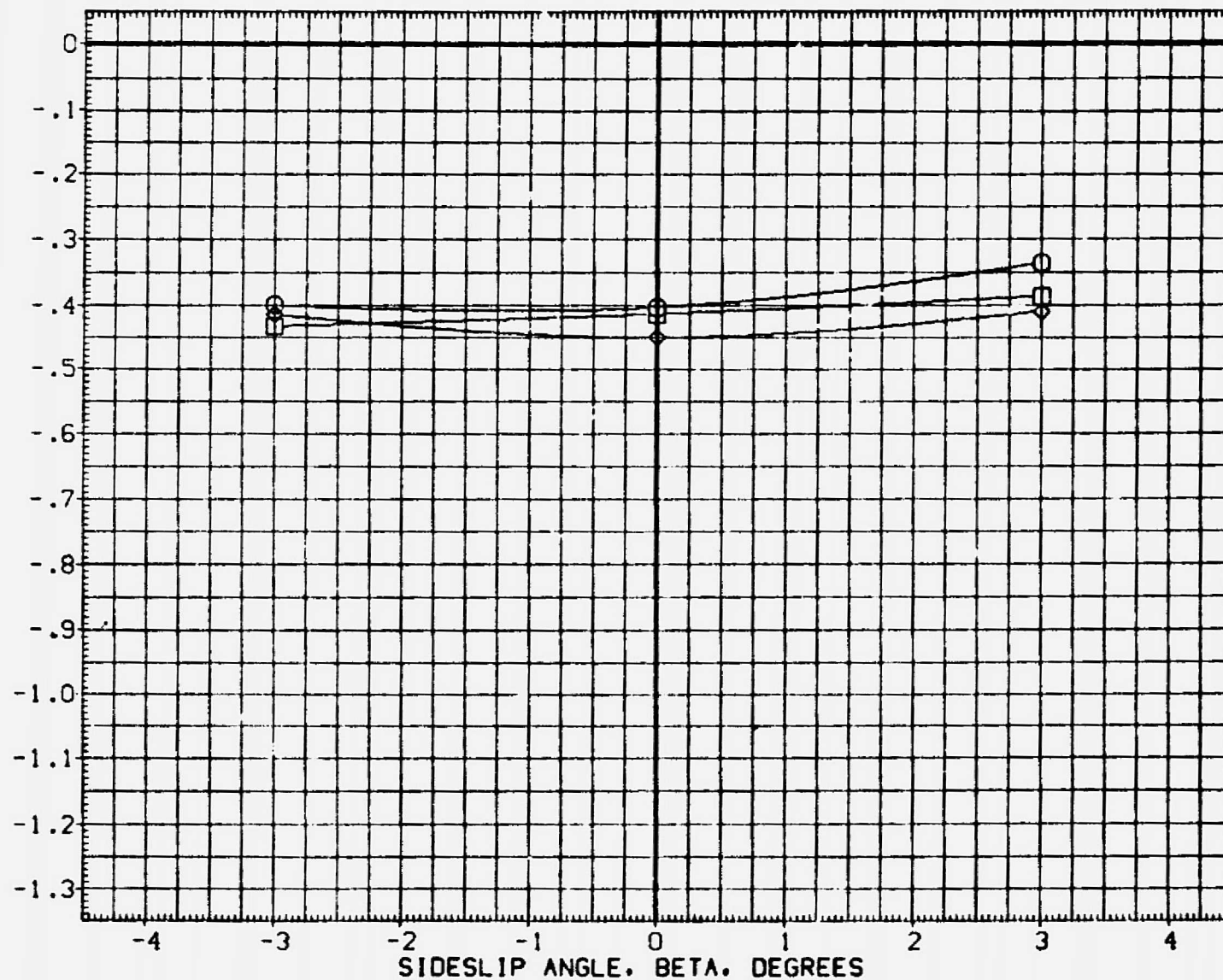


FIGURE 83. AMPLIFICATION FACTOR IN YAW, N49 JETS

SYMBOL

T/QA-1

MACH

PARAMETRIC VALUES

10.330 ALPHA

10.000

BOFLAP

.000

T/QA

95.000

NO JET

2.070

ELEVON

.000

REFERENCE INFORMATION

SREF 2690.0000

50. FT

LREF 471.8000

100.00

BRE 933.6800

100.00

XMR 1076.7000

10. Y0

YMR .0000

10. Z0

ZMRP 325.0000

10. Z0

SCALE .0100

RCS JET AMPLIFICATION FACTOR - NORMAL FORCE, N(NF)

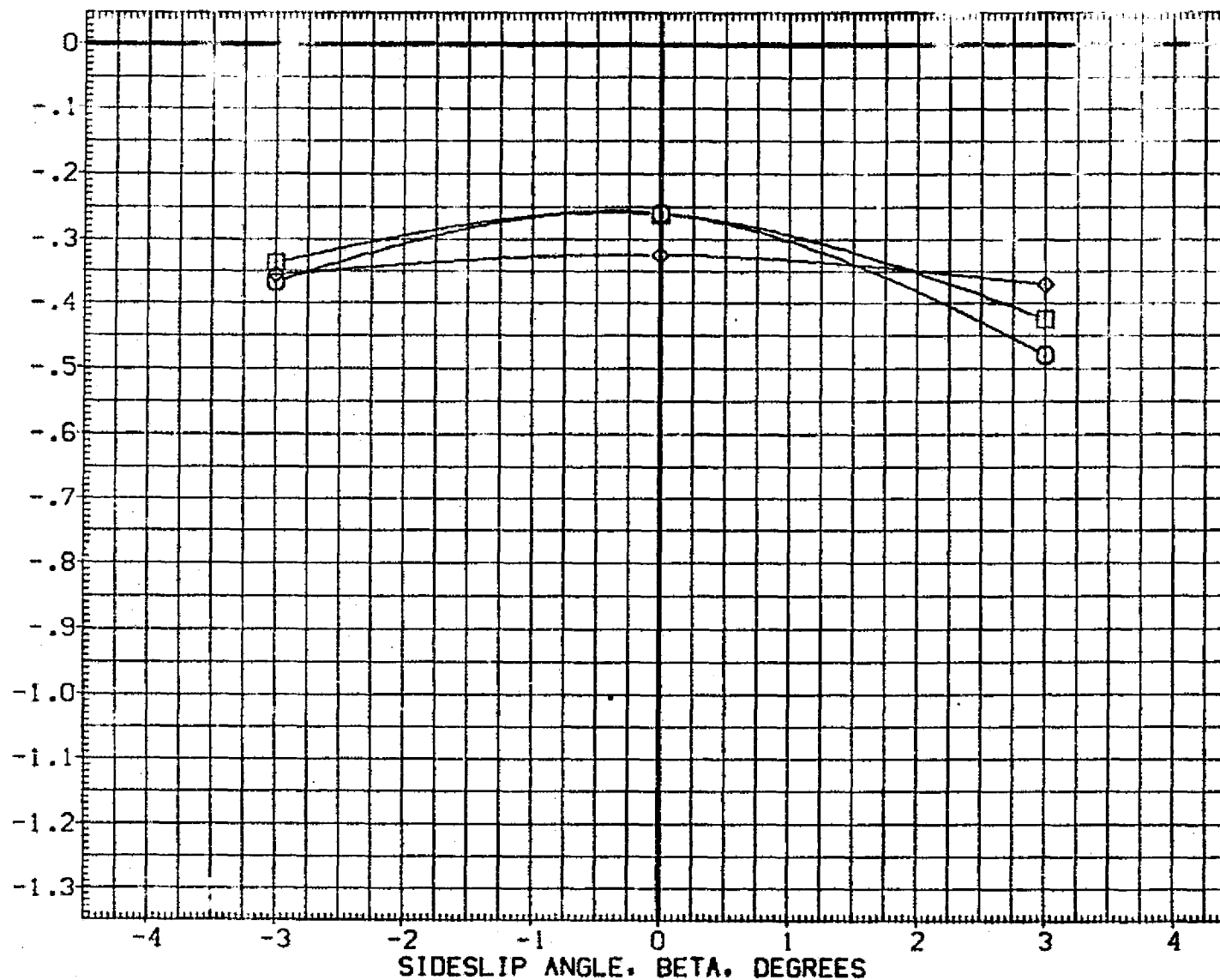


FIGURE 83. AMPLIFICATION FACTOR IN YAW, N49 JETS

01N49

LARC CFHT 118 (MA 22)

(CJA204)

SYMBOL

T/QA-1

PARAMETRIC VALUES

○

47.500

MACH

10.330

ALPHA

20.000

□

95.000

BOFLAP

.000

T/QA

95.000

◇

190.000

NO.JET

2.000

ELEVON

.000

REFERENCE INFORMATION

SREF

2690.0000

SQ.FT.

LREF

474.8000

INCHES

BREF

936.6800

INCHES

XMRP

1076.7000

IN. X0

YMRP

.0000

IN. Y0

ZMRP

375.0000

IN. Z0

SCALE

.0100

RCS JET AMPLIFICATION FACTOR - NORMAL FORCE, N(NF)

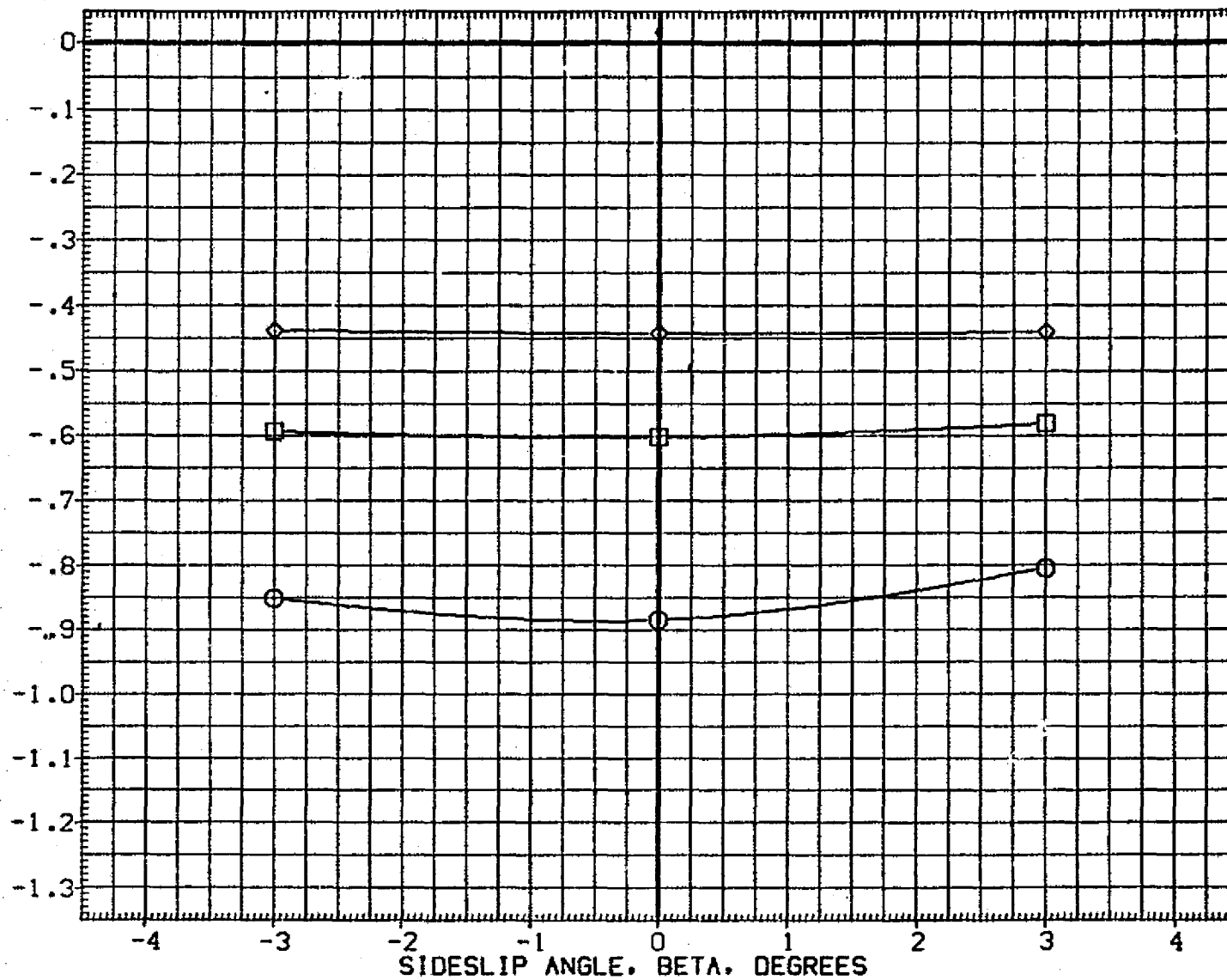


FIGURE 83. AMPLIFICATION FACTOR IN YAW, N49 JETS

SYMBOL	T/QA-1	MACH	PARAMETRIC VALUES	ALPHA	35.000
○	47.500	BDFLAP	.000	T/QA	95.000
□	95.000	NO. JET	2.000	ELEVON	.000
◇	190.000				

REFERENCE INFORMATION		
SREF	2600.0000	50. FT.
LREF	174.8000	INCHES
BREF	936.6800	INCHES
XHRP	1076.7000	INCHES
YHRP	.0000	IN. Y0
ZHRP	375.0000	IN. Z0
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - NORMAL FORCE, N(NF)

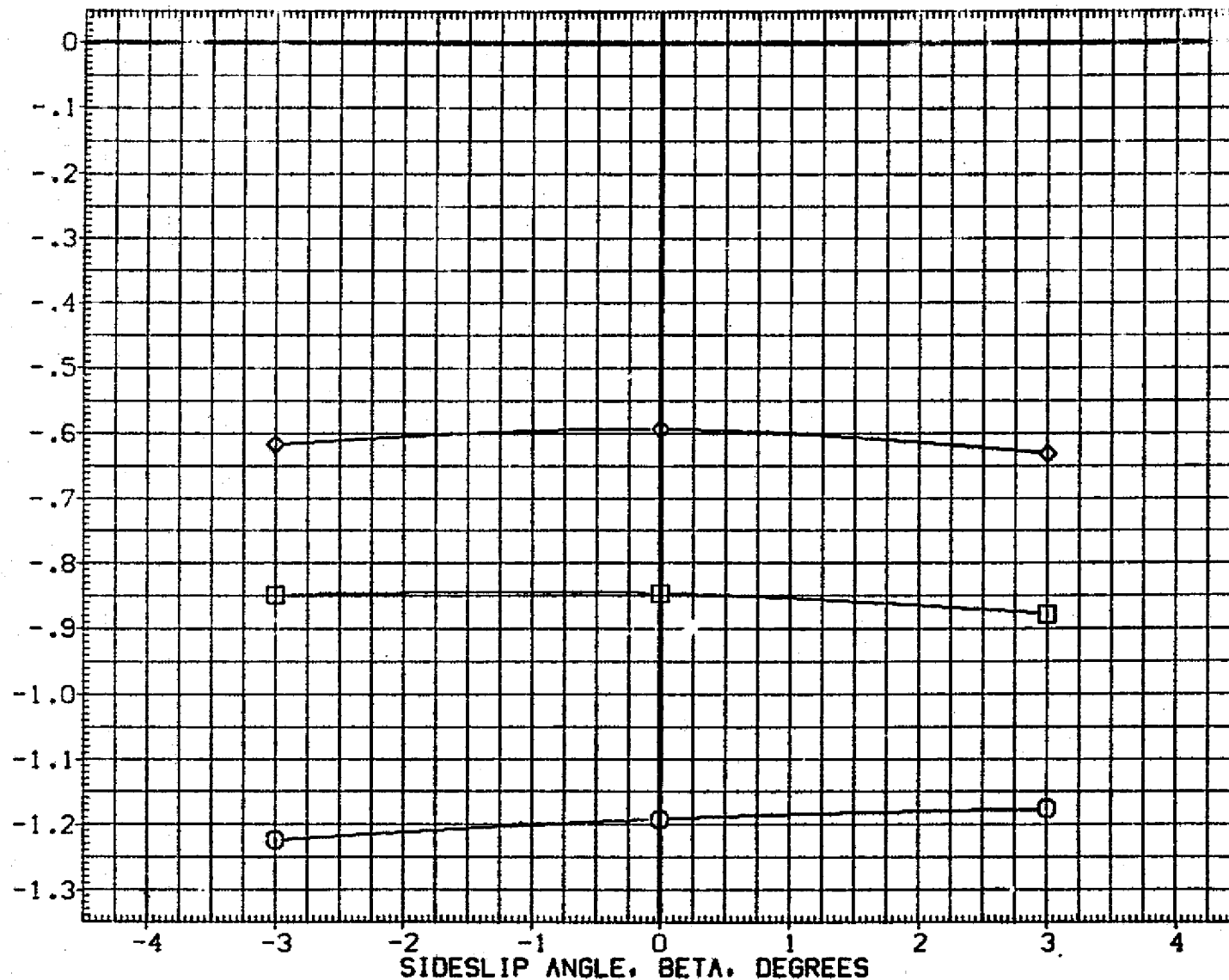


FIGURE 83. AMPLIFICATION FACTOR IN YAW, N49 JETS

G1N4S

LARC CFHT 116 (MA-22)

(CJA204)

SYMBOL	T/OA-1	MACH	PARAMETRIC VALUES		
○	47.500		10.330	ALPHA	-10.000
□	95.000	BDFLAP	.000	T/OA	95.000
◇	190.000	NO.JET	2.000	ELEVON	.000

REFERENCE INFORMATION		
SREF	2690.0000	50.FT.
LREF	474.8000	INCHES
BREF	936.6800	INCHES
XHRP	1076.7000	IN. X0
YHRP	.0000	IN. Y0
ZHRP	375.0000	IN. Z0
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - AXIAL FORCE, N(AF)

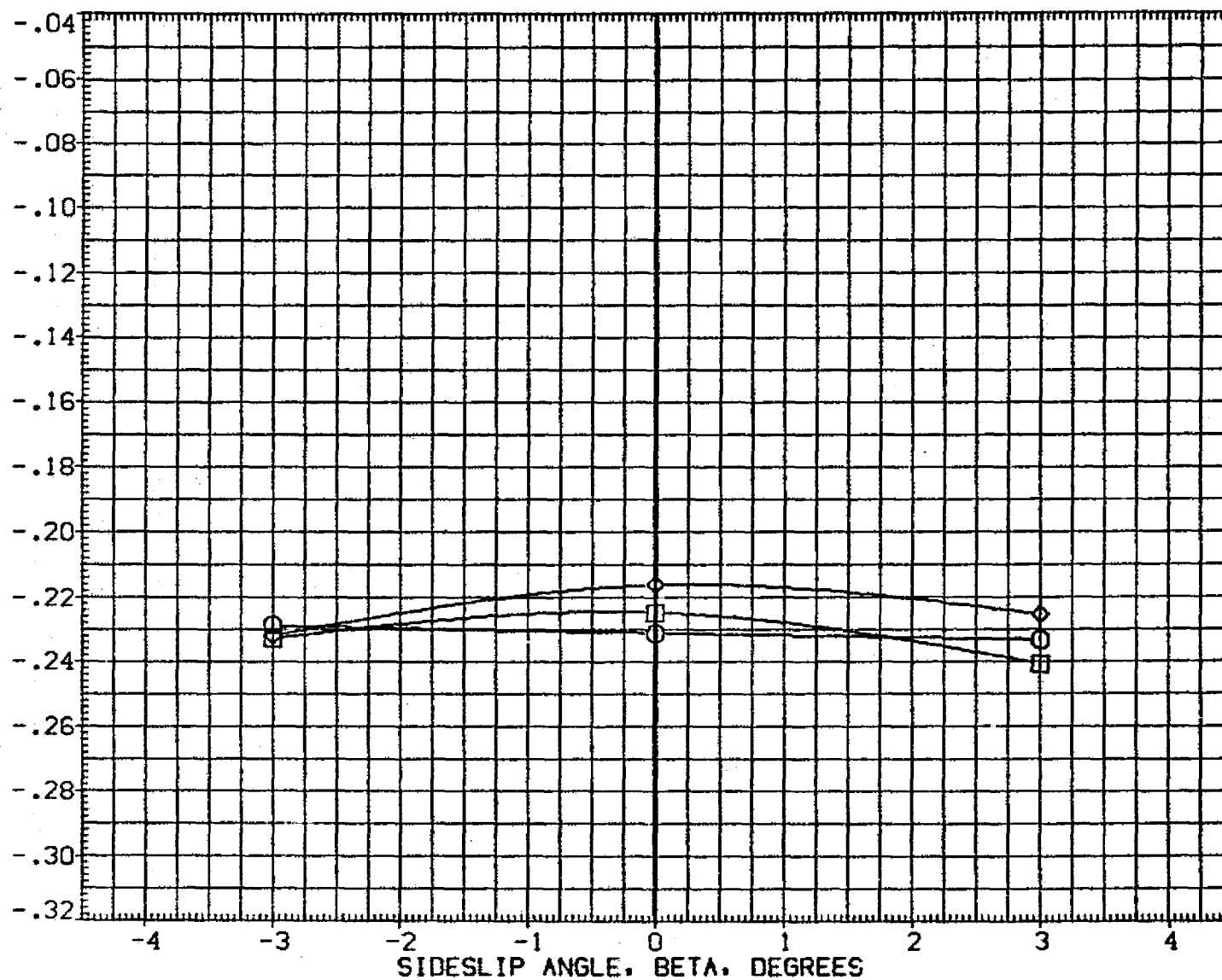


FIGURE 83. AMPLIFICATION FACTOR IN YAW, N49 JETS

01N49

LARC CFHT 118 (MA-22)

(CJA204)

SYMBOL

○
□
◇

T/OA-1

47.500

MACH

90FLAP

NOJET

PARAMETRIC VALUES

10.330

ALPHA

.000

T/OA

95.000

ELEVON

.000

REFERENCE INFORMATION

SREF

2620.0000

50.FT.

LREF

477.8000

INCHES

BREF

955.6800

INCHES

XREF

1076.7000

IN. X0

YREF

.0000

IN. Y0

ZREF

375.0000

IN. Z0

SCALE

.0100

RCS JET AMPLIFICATION FACTOR - AXIAL FORCE, N(AF)

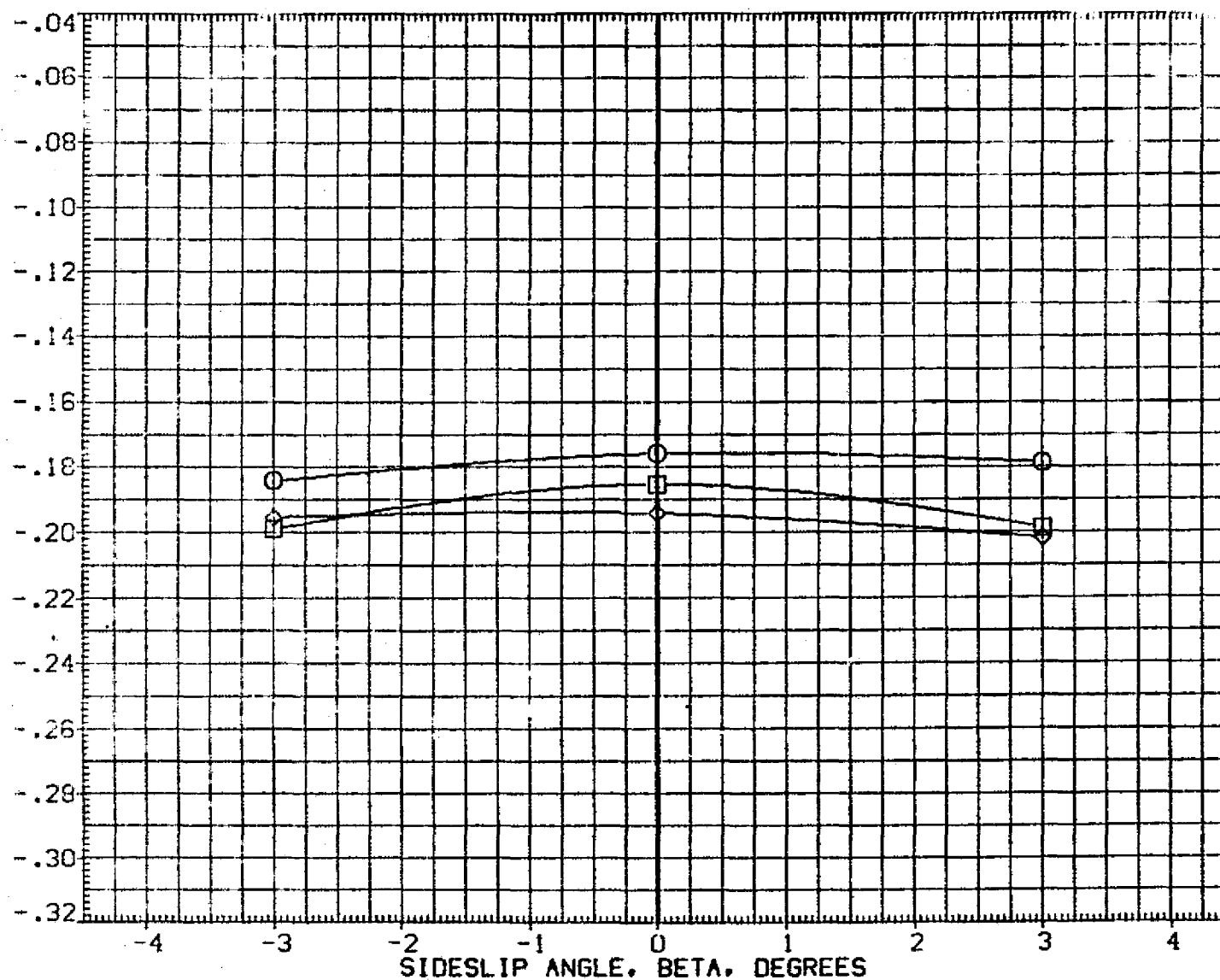


FIGURE 83. AMPLIFICATION FACTOR IN YAW, N49 JETS

01N49

LARC CFHT 118 (MA-22)

(CJA204)

SYMBOL	T/QA-1	PARAMETRIC VALUES
○	47.500	MACH 10.330 ALPHA 10.000
□	95.000	BDFLAP .000 T/QA 95.000
◇	190.000	NO.JET 2.000 ELEVON .000

REFERENCE INFORMATION		
SREF	2690.0000	50.FT.
LREF	474.8000	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

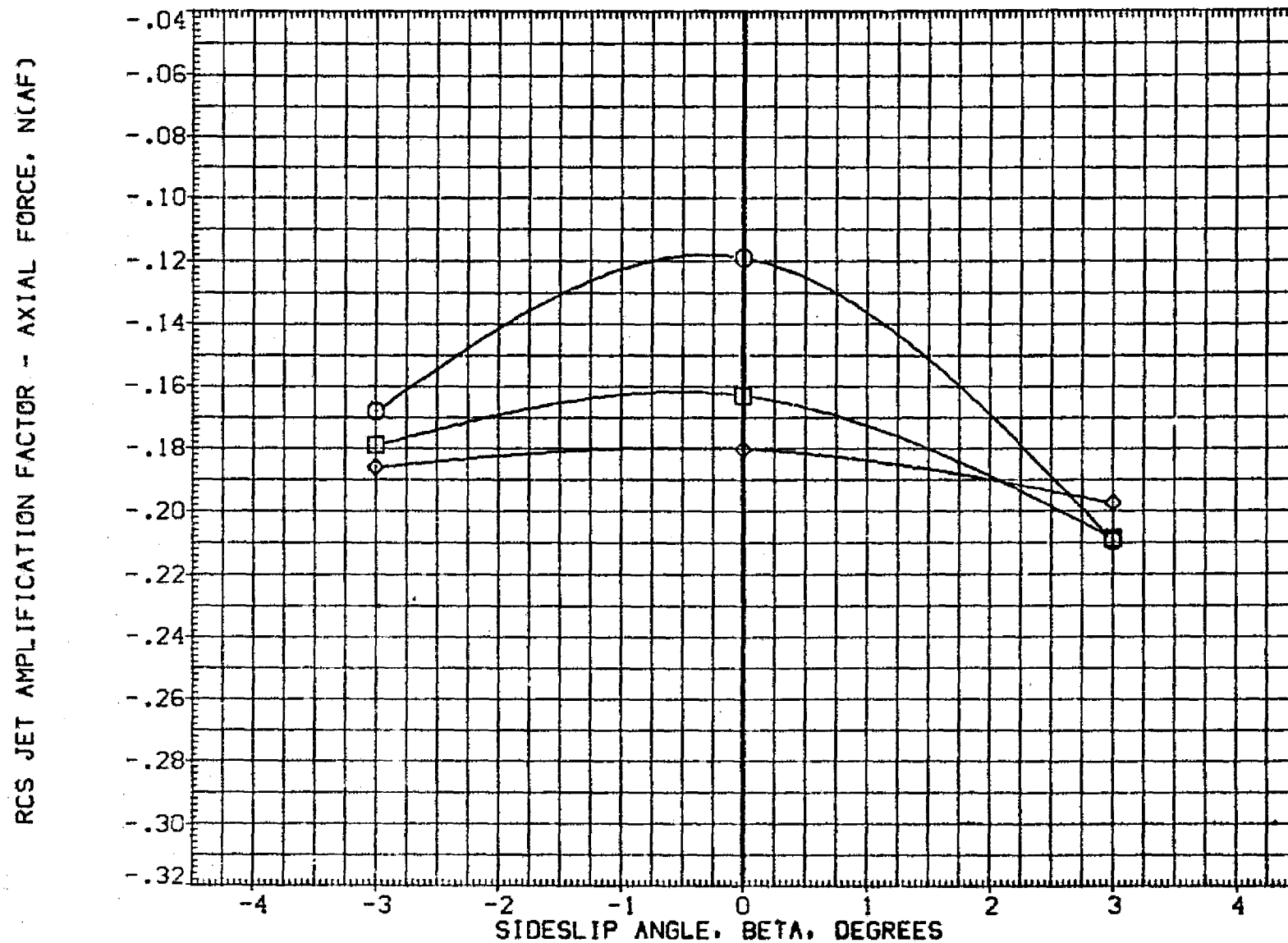


FIGURE 83. AMPLIFICATION FACTOR IN YAW, N49 JETS

SYMBOL	T/OA-1	MACH	PARAMETRIC VALUES	ALPHA	20.000
○	47.500	BDFLAP	.000	T/OA	95.000
□	95.000	NO JET	2.000	ELEVON	.000
◇	190.000				

REFERENCE INFORMATION

SREF	2600.0000	59.57.
LREF	474.8000	
BRE	936.6800	INC. 30
YREF	1076.7000	IN. 30
ZREF	.0000	IN. 20
SCALE	375.0000	
	.0100	

RCS JET AMPLIFICATION FACTOR - AXIAL FORCE, N(AF)

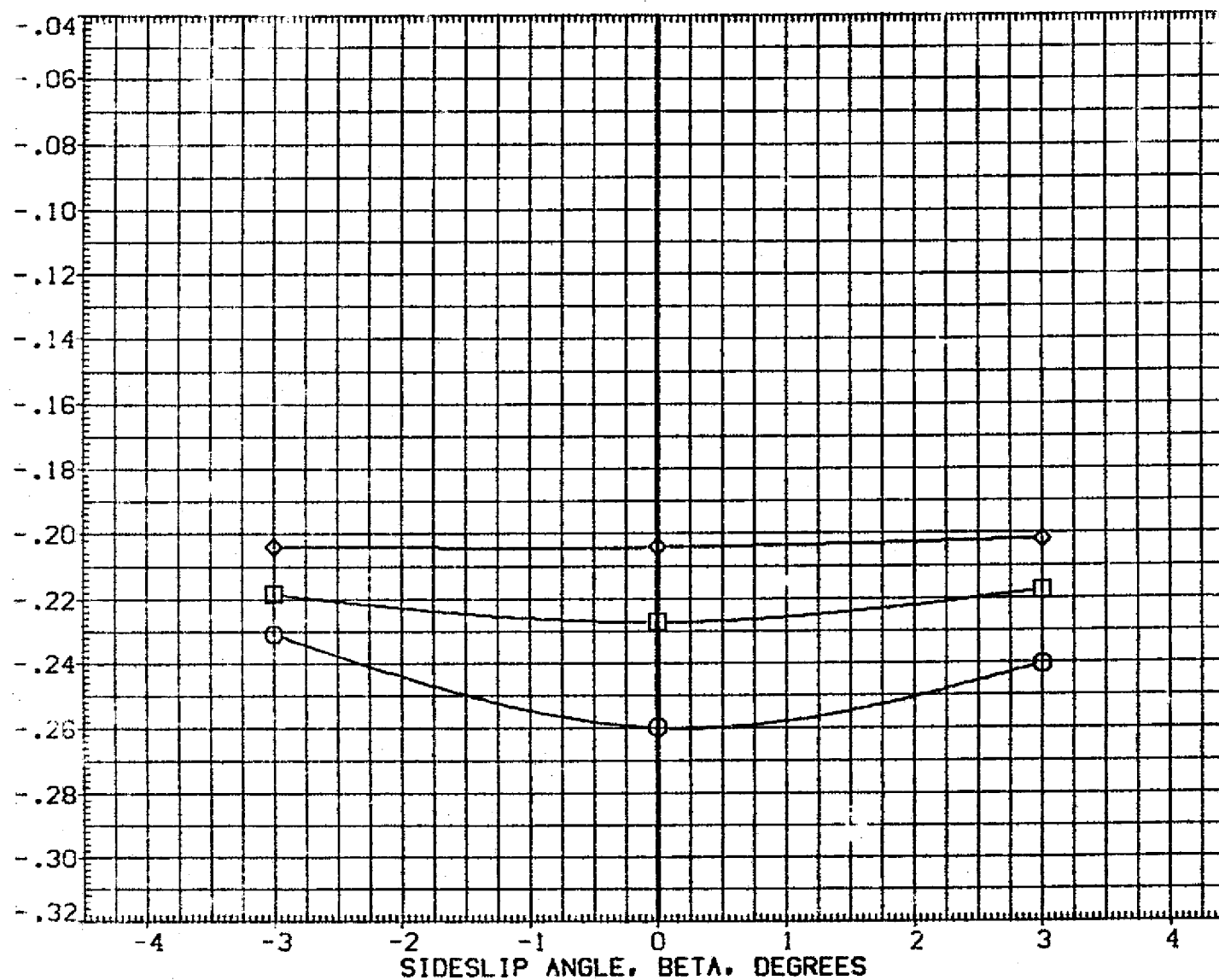


FIGURE 83. AMPLIFICATION FACTOR IN YAW, N49 JETS

01N49

LARC CFHT 118 (MA-22)

(CJA204)

SYMBOL

T/OA-1

MACH

PARAMETRIC VALUES

10.330

ALPHA

35.000

○

95.000

BOFLAP

.000

T/OA

95.000

□

190.000

NO JET

2.000

ELEVON

.000

◇

REFERENCE INFORMATION

SREF

2690.0000

SQ.FT.

LREF

474.8000

INCHES

BREF

936.6800

INCHES

XMRP

1076.7000

IN. YD

YMRP

.0000

IN. YD

ZMRP

375.0000

IN. ZD

SCALE

.0100

RCS JET AMPLIFICATION FACTOR - AXIAL FORCE, NCAF)

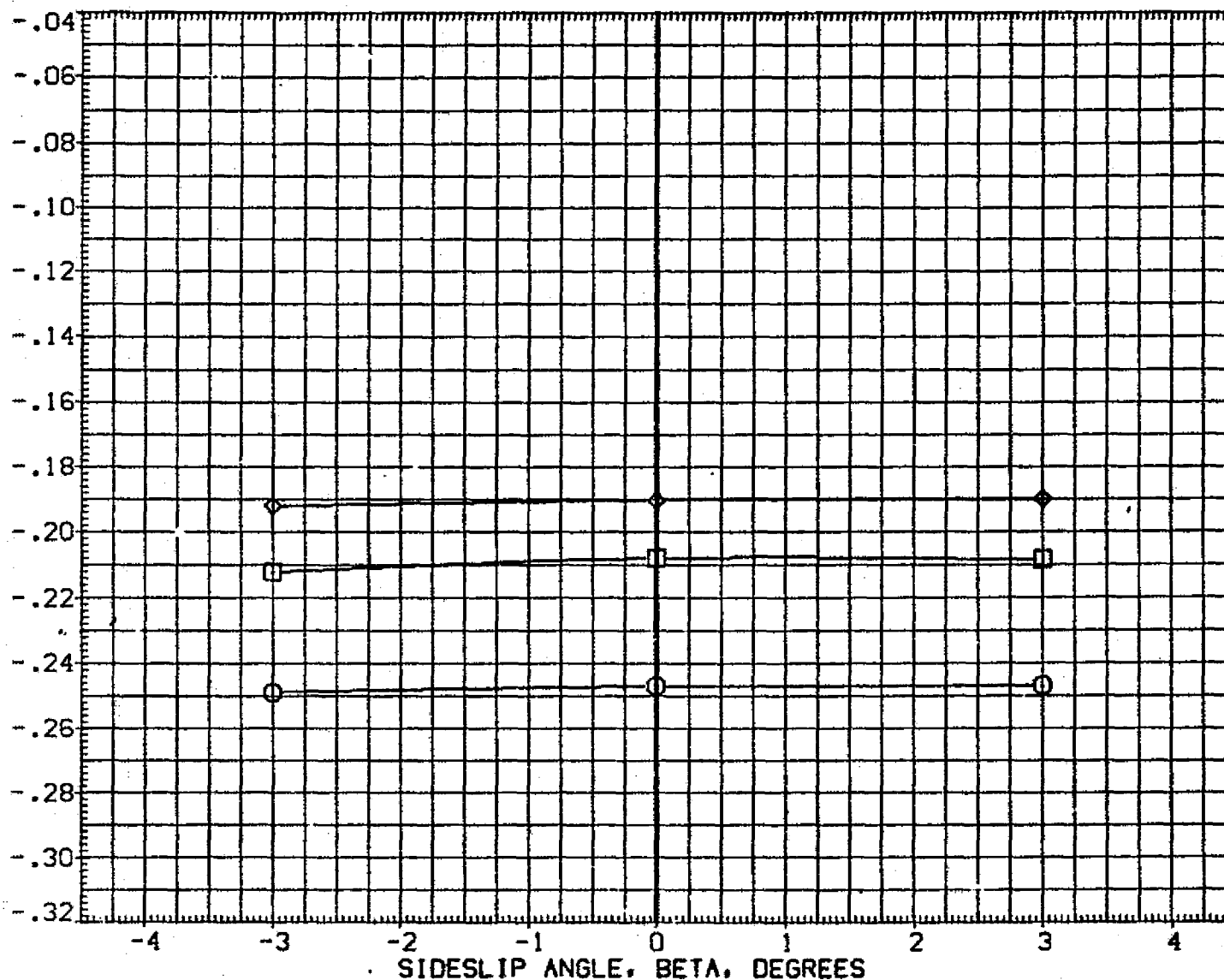


FIGURE 83. AMPLIFICATION FACTOR IN YAW, N49 JETS

SYMBOL



T/QA-1

47.500

MACH

BDPLAP

190.000

NO.JET

PARAMETRIC VALUES

10.330

ALPHA

-10.000

T/QA

95.000

ELEVON

.000

REFERENCE INFORMATION

SREF 2690.0000

LREF 474.8000

BREF 936.6800

XMR 1076.7000

YMR .0000

ZMRP 375.0000

SCALE .0100

50.FT.

INCHES

INCHES

IN. X0

IN. Y0

IN. Z0

RCS JET AMPLIFICATION FACTOR - SIDE FORCE, N(SF)

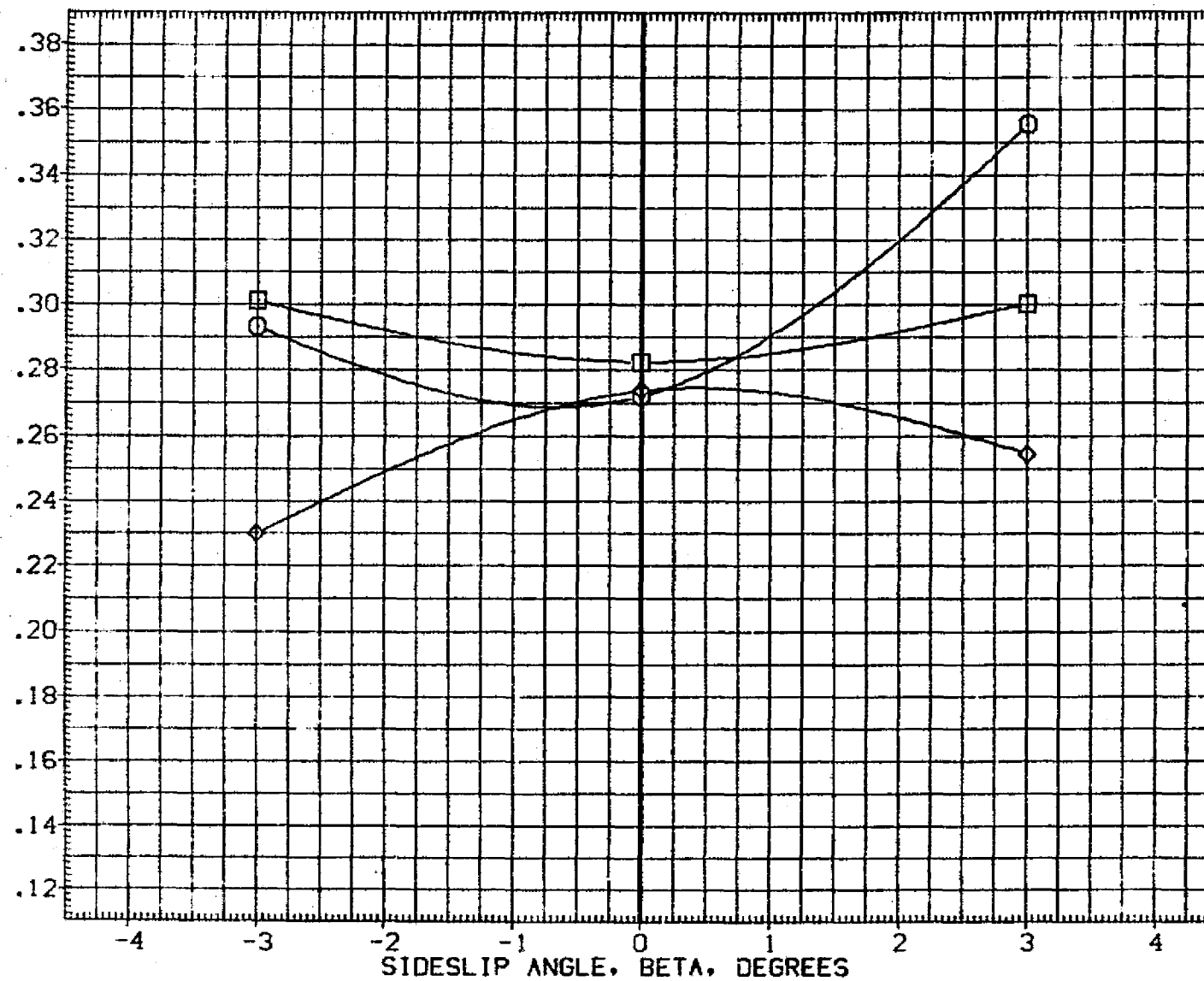


FIGURE 83. AMPLIFICATION FACTOR IN YAW, N49 JETS

01N49

LARC CFHT 118 (MA-22)

(CJA204)

SYMBOL

T/OA-1

MACH

PARAMETRIC VALUES

10.330

ALPHA

.000

○

47.500

8DFLAP

.000

T/OA

95.000

□

95.000

NO.JET

2.000

ELEVON

.000

◇

190.000

REFERENCE INFORMATION

SREF 2690.0000

SQ.FT.

LREF 474.8000

INCHES

BREF 936.6800

INCHES

XMRP 1076.7000

IN. X0

YMRP .0000

IN. Y0

ZMRP 375.0000

SCALE .0100

RCS JET AMPLIFICATION FACTOR - SIDE FORCE, N(SF)

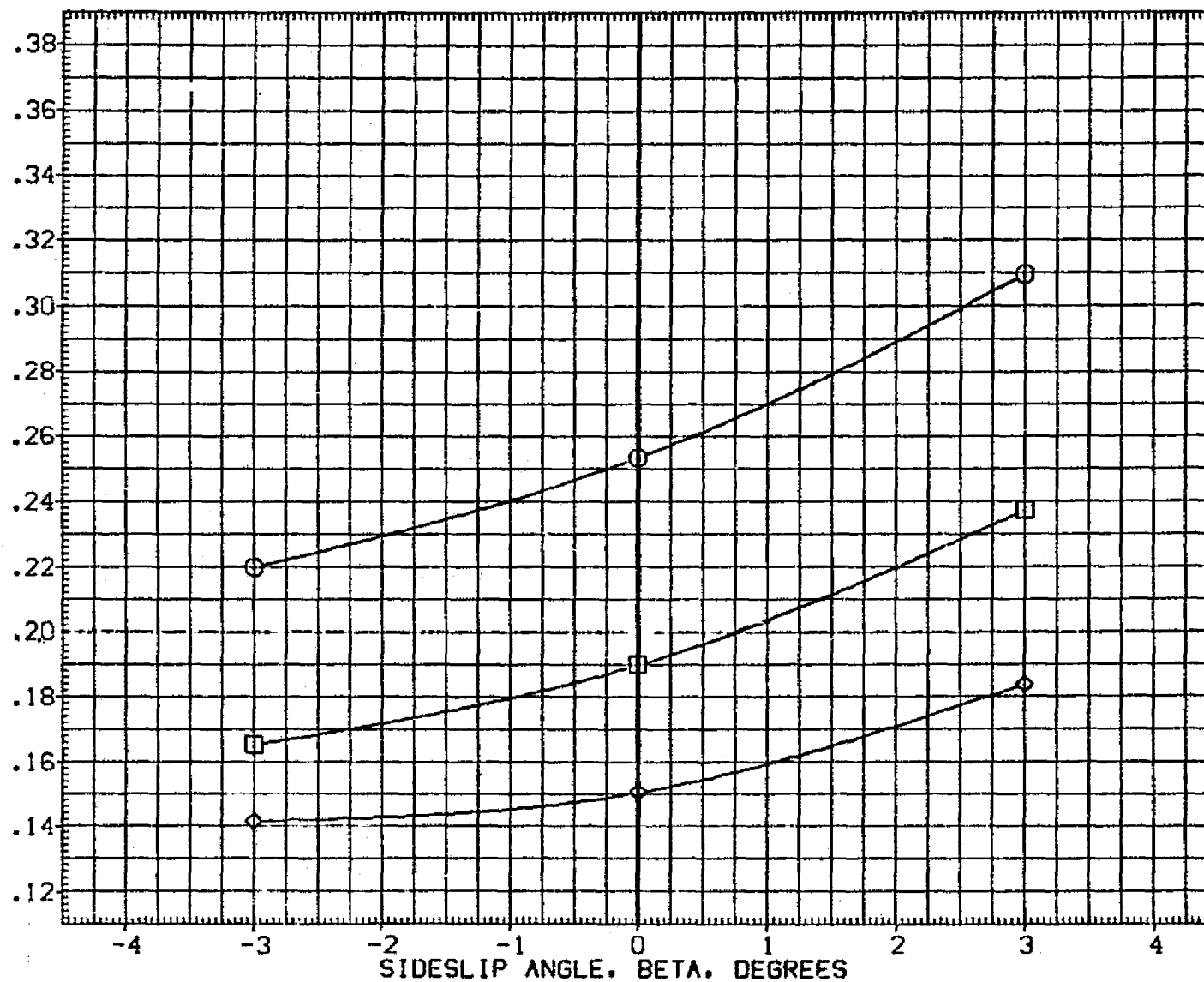


FIGURE 83. AMPLIFICATION FACTOR IN YAW, N49 JETS

SYMBOL	T/QA-1	PARAMETRIC VALUES			
○	47.500	MACH	10.330	ALPHA	10.000
□	95.000	BDFLAP	.000	T/QA	95.000
◇	190.000	NO. JET	2.000	ELEVON	.000

REFERENCE INFORMATION		
SREF	2990.0000	50. FT.
LREF	47.8000	INCHES
BREF	93.6800	INCHES
XMR	1076.7000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - SIDE FORCE, N(SF)

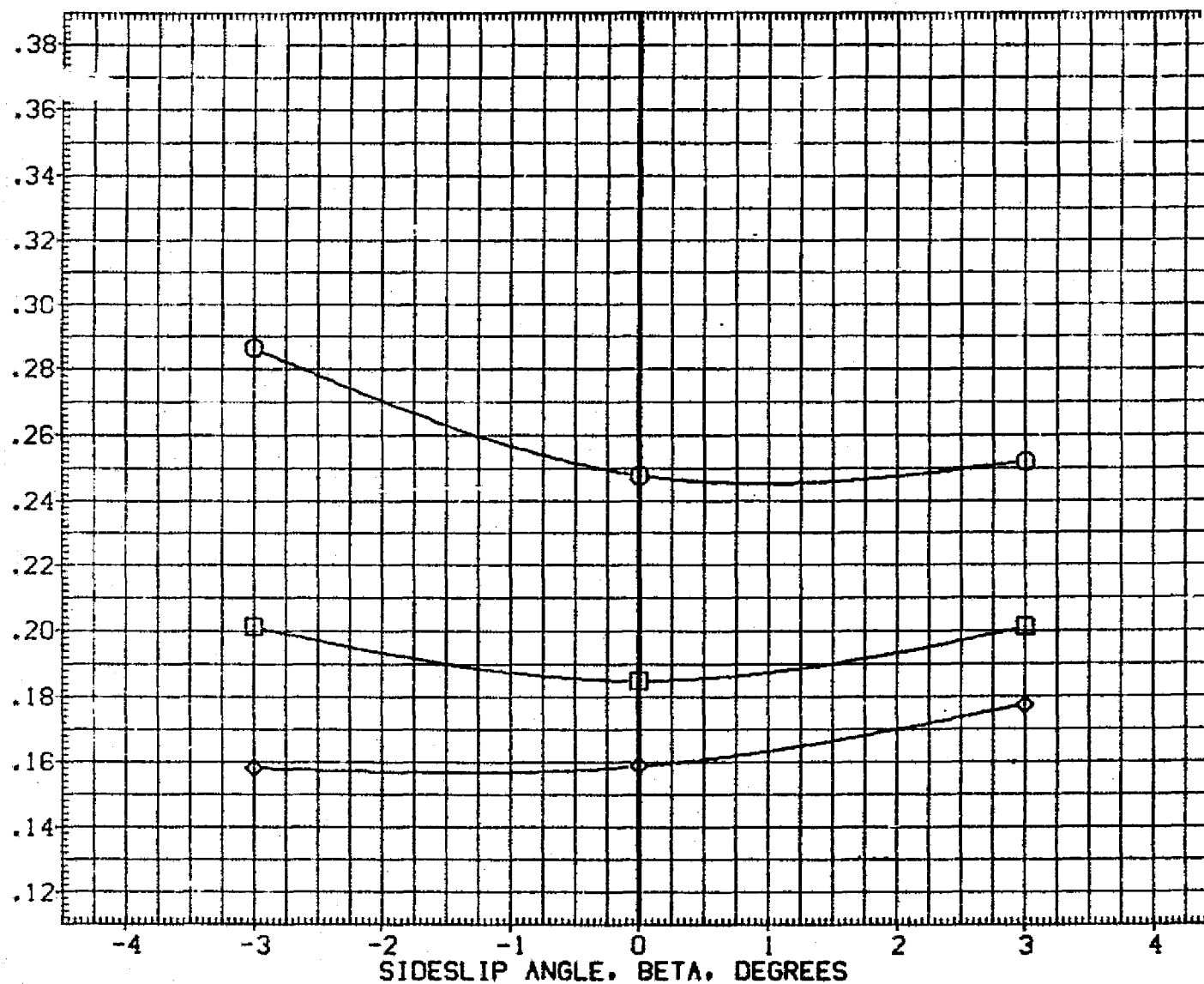


FIGURE 83. AMP_LIFICATION FACTOR IN YAW, N49 JETS

01N49

LARC CFHT 116 (MA-22)

(CJA204)

SYMBOL	T/OA-1	MACH	PARAMETRIC VALUES	ALPHA	20.000
○	47.500	BDFLAP	.000	T/OA	95.000
□	95.000	NO.JET	2.000	ELEVON	.000
◇	190.000				

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8000	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - SIDE FORCE, N(SF)

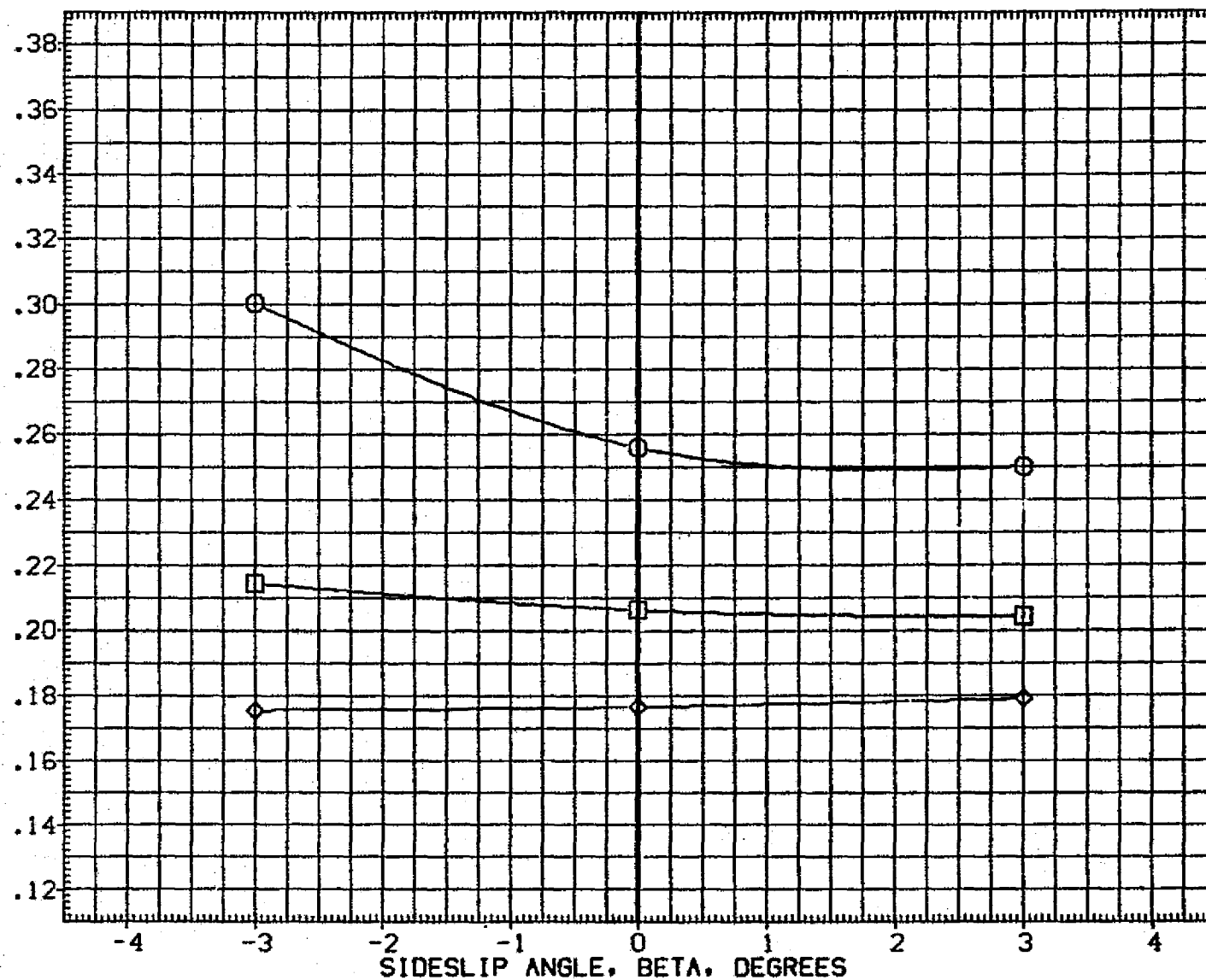


FIGURE 83. AMPLIFICATION FACTOR IN YAW, N49 JETS

SYMBOL



T/QA-1

47.500

95.000

190.000

MACH

BDFLAP

NOJET

PARAMETRIC VALUES

10.330

.000

2.000

ALPHA

T/QA

ELEVON

35.000

95.000

.000

REFERENCE INFORMATION

SREF

LREF

BREF

XMRP

YMRP

ZMRP

SCALE

2690.0000

474.8000

936.6800

1076.7000

.0000

375.0000

.0100

SQ.FT.

INCHES

INCHES

IN. Y0

IN. Z0

RCS JET AMPLIFICATION FACTOR - SIDE FORCE, N(SF)

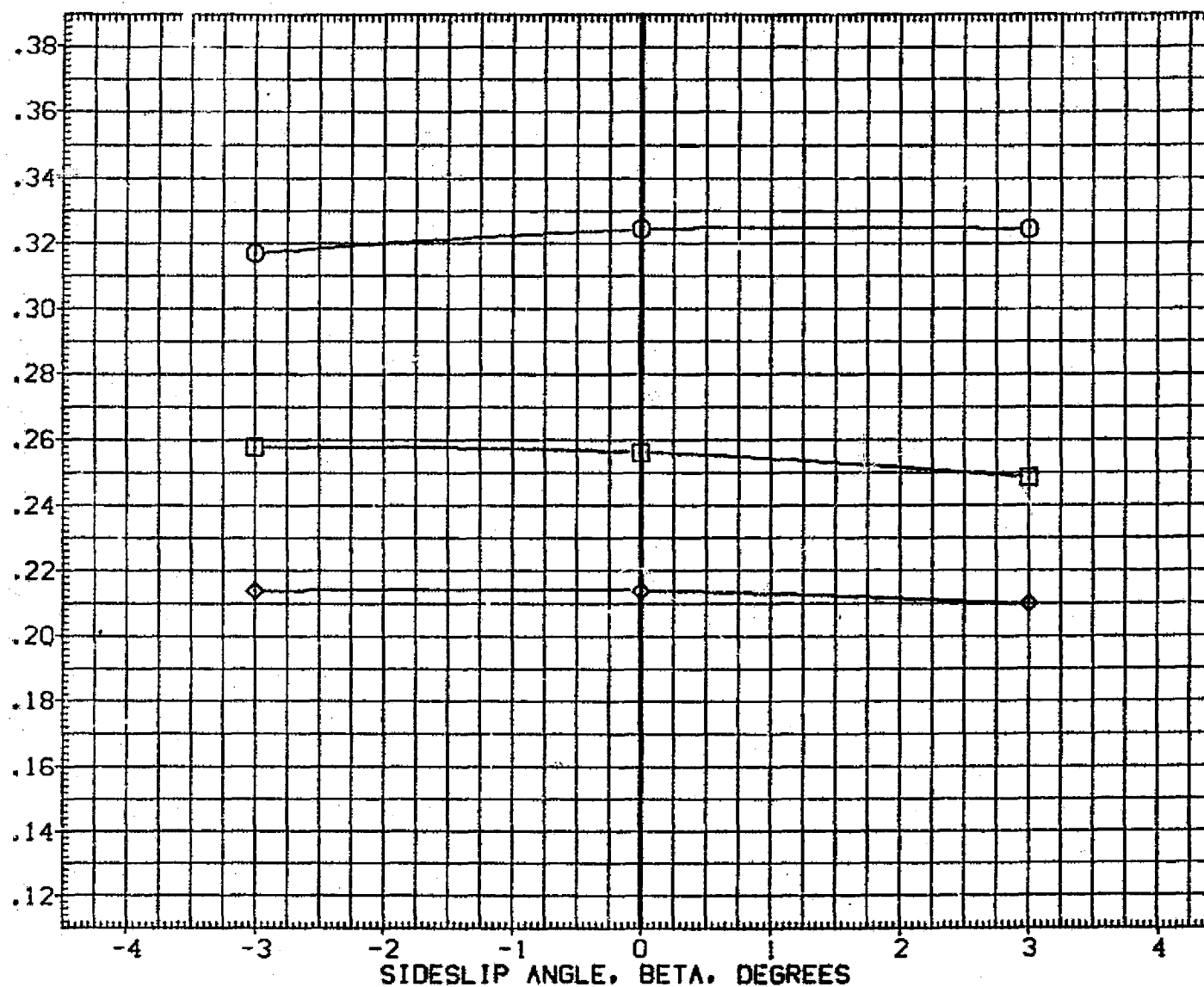


FIGURE 83. AMPLIFICATION FACTOR IN YAW, N49 JETS

01N83

LARC CPH! 118 (MA-22)

(CJA213)

SYMBOL

T/QA-1

MACH

PARAMETRIC VALUES

10.330

ALPHA

-10.000

○

95.000

BDFLAP

.000

T/QA

142.500

□

190.000

NO.JET

3.000

ELEVON

.000

◇

REFERENCE INFORMATION

SREF 2690.0000

SQ.FT.

LREF 474.8000

INCHES

BREF 936.6800

INCHES

XMRP 1076.7000

IN. XO

YMRP .0000

IN. YO

ZMRP 375.0000

IN. ZO

SCALE .0100

RCS JET AMPLIFICATION FACTOR - PITCH, N(PM)

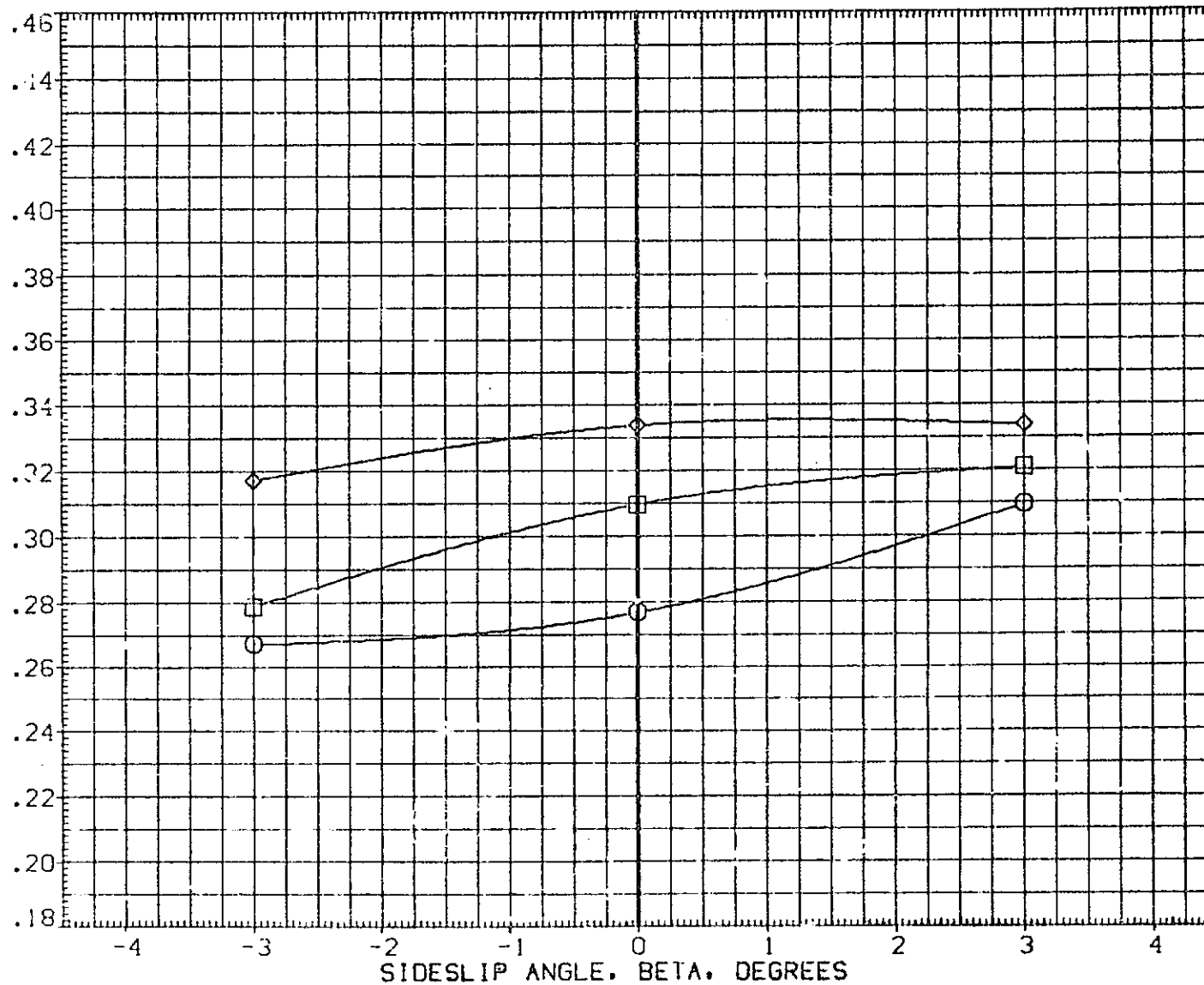


FIGURE 84. AMPLIFICATION FACTOR IN YAW, N83 JETS

SYMBOL	T/QA-1	MACH	PARAMETRIC VALUES	ALPHA	T/QA
○	47.500	10.330	.000	.000	142.500
□	95.000	10.330	.000	.000	142.500
◇	190.000	10.330	.000	.000	142.500

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8000	INCHES
BREF	936.6800	INCHES
XHRP	1076.7000	IN. X0
YHRP	.0000	IN. Y0
ZHRP	375.0000	IN. Z0
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - PITCH, N(PM)

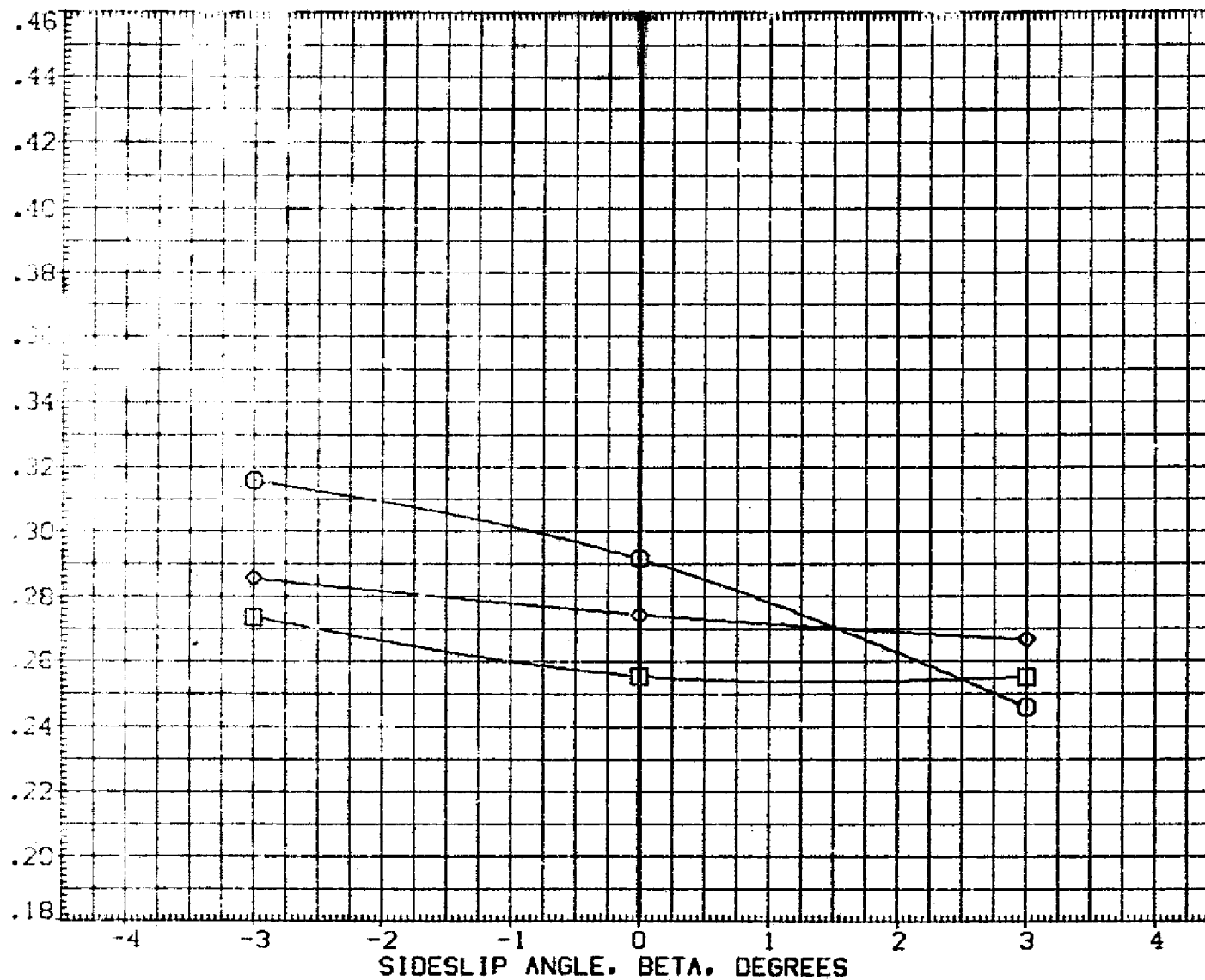


FIGURE 84. AMPLIFICATION FACTOR IN YAW, N83 JETS

01N83

LARC CFHT 116 (MA 22)

(CJA213)

SYMBOL	T/QA-1	PARAMETRIC VALUES
○	47.500	MACH 10.330 ALPHA 10.000
□	95.000	BDFLAP .000 T/QA 142.500
◇	190.000	NO.JET 3.000 ELEVON .000

REFERENCE INFORMATION		
SREF	2690.0000	50.FT.
LREF	474.8000	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - PITCH, N(PM)

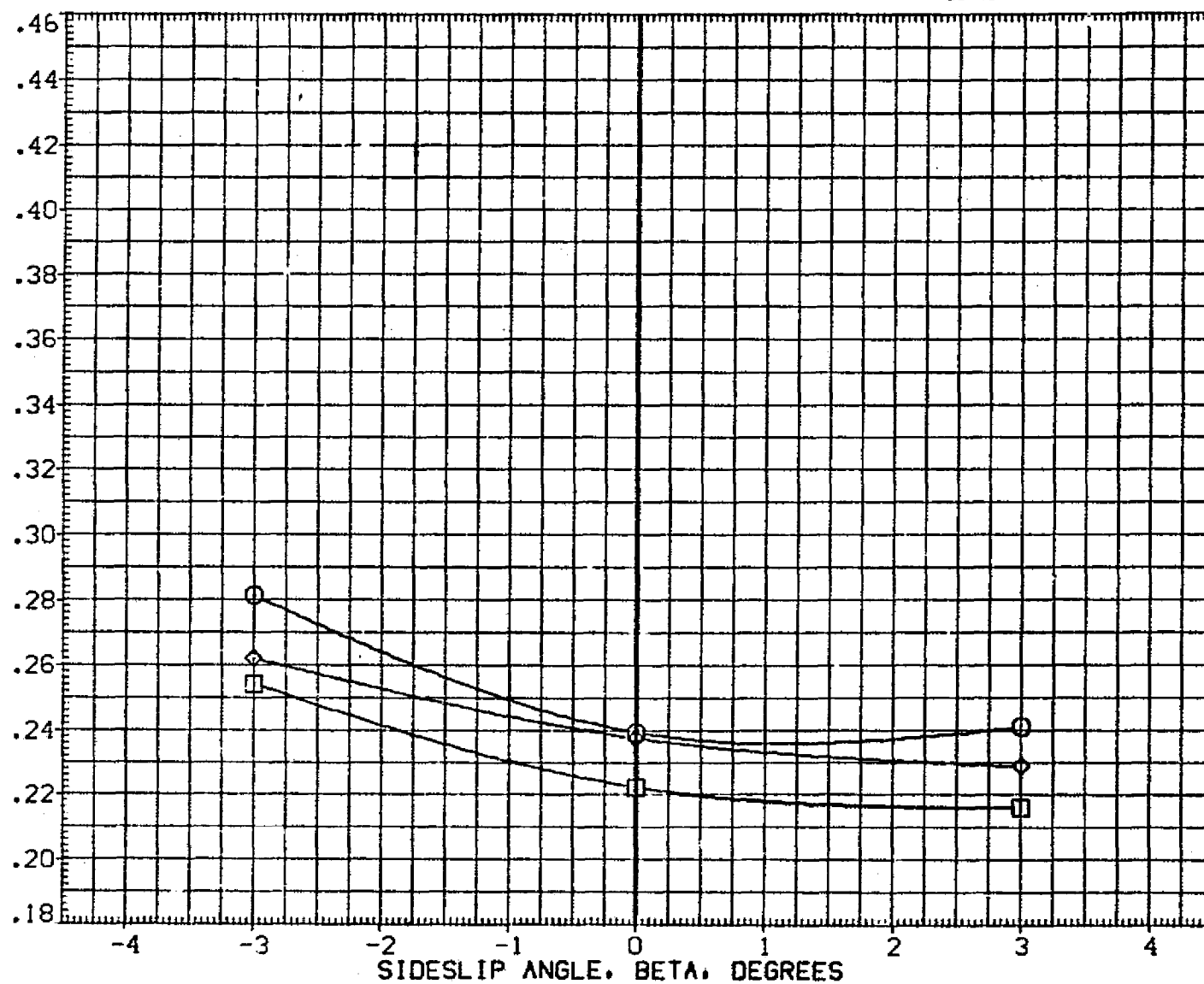


FIGURE 84. AMPLIFICATION FACTOR IN YAW, N83 JETS

SYMBOL

○
□
◇

T/QA-1

47.500

95.000

190.000

MACH

90FLAP

NO. 111

PARAMETRIC VALUES

10.330

.000

3.000

ALPHA

T/QA

ELEVON

20.000

142.500

.000

REFERENCE INFORMATION

SREF

LREF

BREF

XREF

YREF

ZREF

SCALE

2690.0000

474.8000

936.6800

1076.7000

.0000

375.0000

.0100

50. FT.

INCHES

INCHES

IN. X0

IN. Y0

IN. Z0

RCS JET AMPLIFICATION FACTOR - PITCH, NCPM)

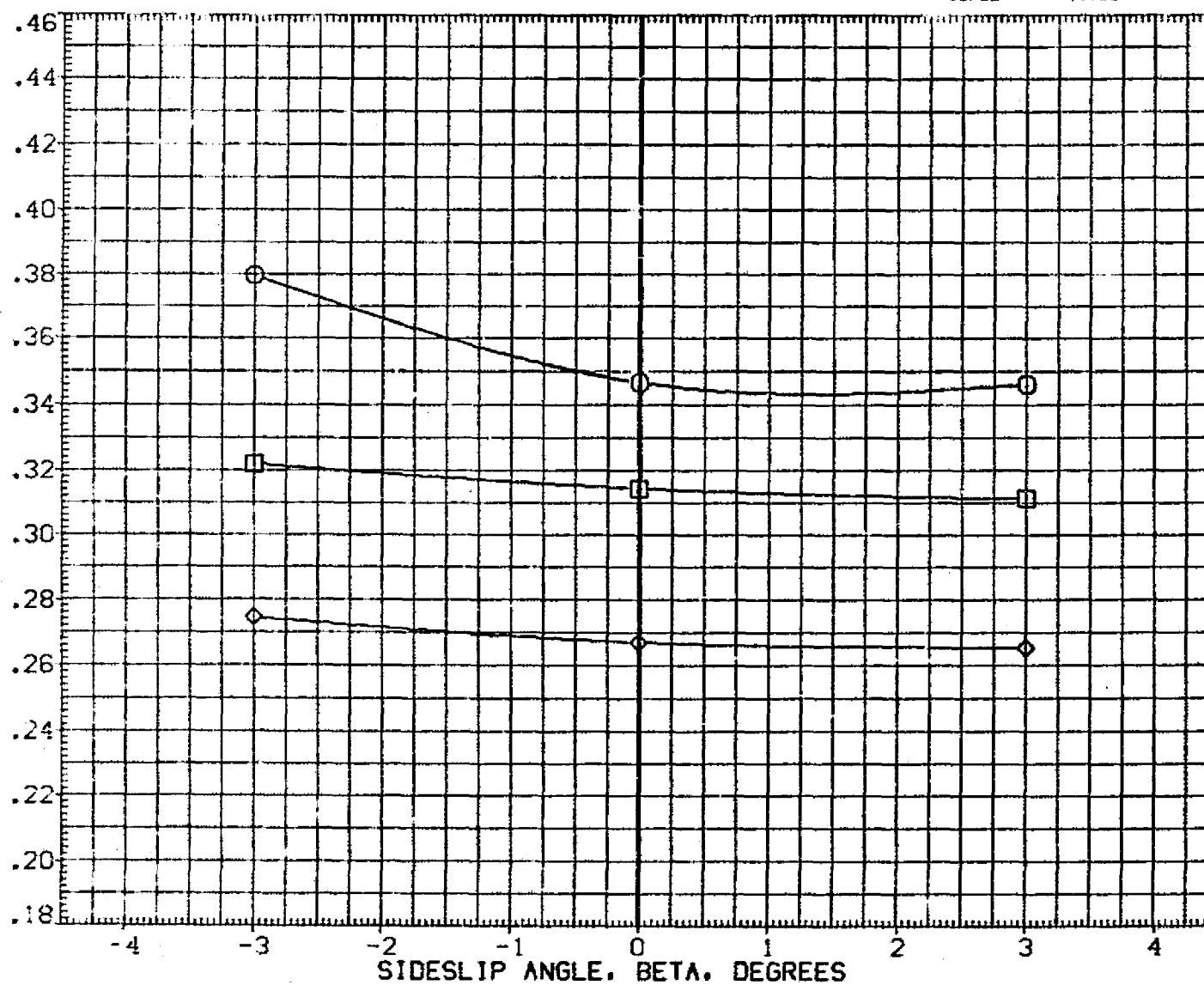


FIGURE 84. AMPLIFICATION FACTOR IN YAW, N83 JETS

01N83

LARC CHT 118 (MA-22)

(CJA213)

SYMBOL

○
□
◇

T/QA-1

47.500

MACH

PARAMETRIC VALUES

10.330

ALPHA

35.000

BDFLAP

.000

T/QA

142.500

NOJET

3.000

ELEVON

.000

REFERENCE INFORMATION

SREF	2690.0000	SO.FT.
LREF	474.8000	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. XD
YMRP	.0000	IN. YD
ZMRP	375.0000	IN. ZD
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - PITCH, N(PM)

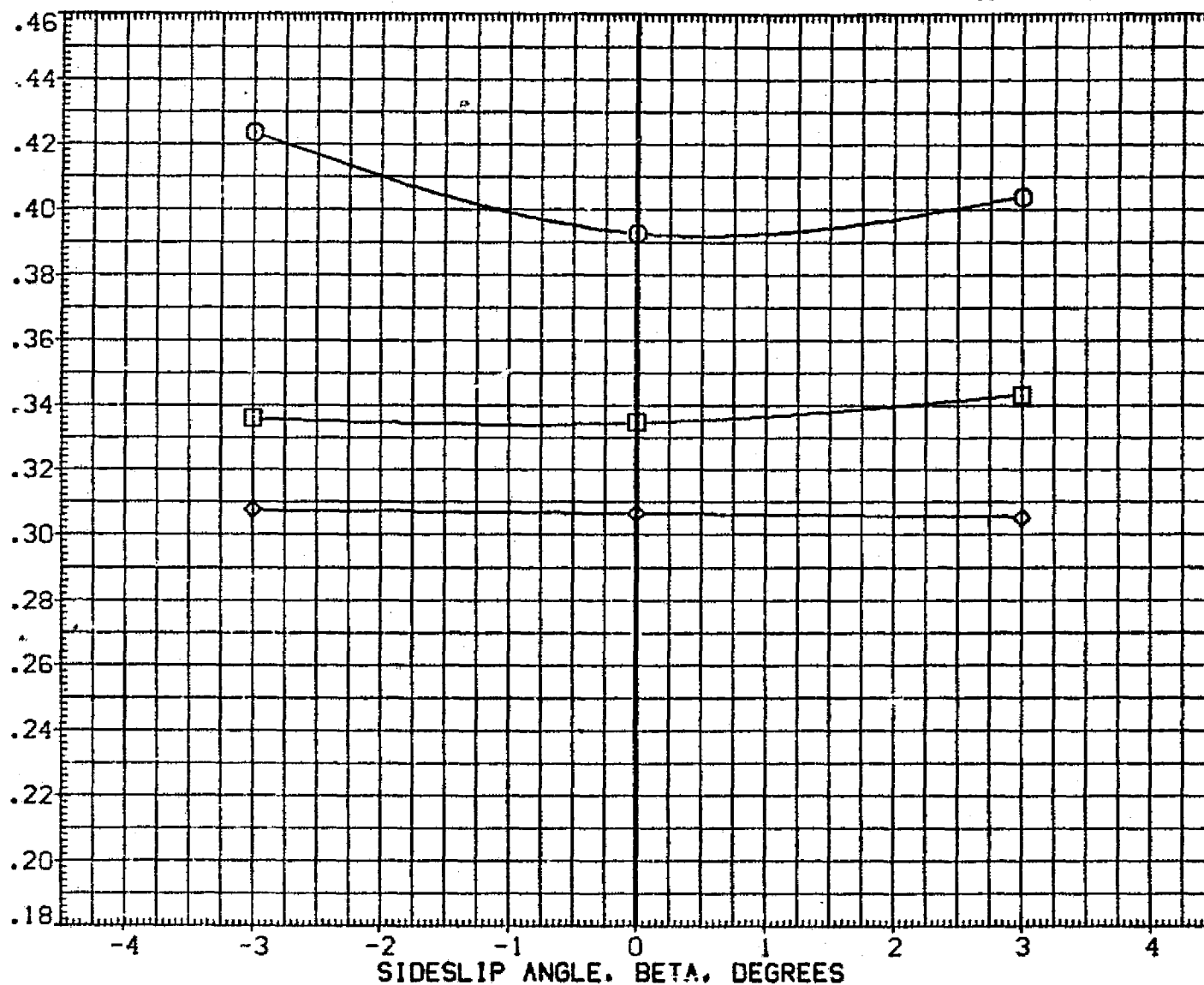


FIGURE 84. AMPLIFICATION FACTOR IN YAW, N83 JETS

SYMBOL

○
□
◇

T/QA-1

47.500

MACH

BDFLAP

NO. JET

PARAMETRIC VALUES

13.330

ALPHA

T/QA

ELEVON

-10.000

142.500

.000

REFERENCE INFORMATION

SREF 2690.0000

LREF 174.8000

BREF 936.6800

XMRP 1076.7000

YMRP .0000

ZMRP 375.0000

SCALE .0100

SQ.FT.

INCHES

INCHES

IN. X0

IN. Y0

IN. Z0

RCS JET AMPLIFICATION FACTOR - ROLL, NCRM)

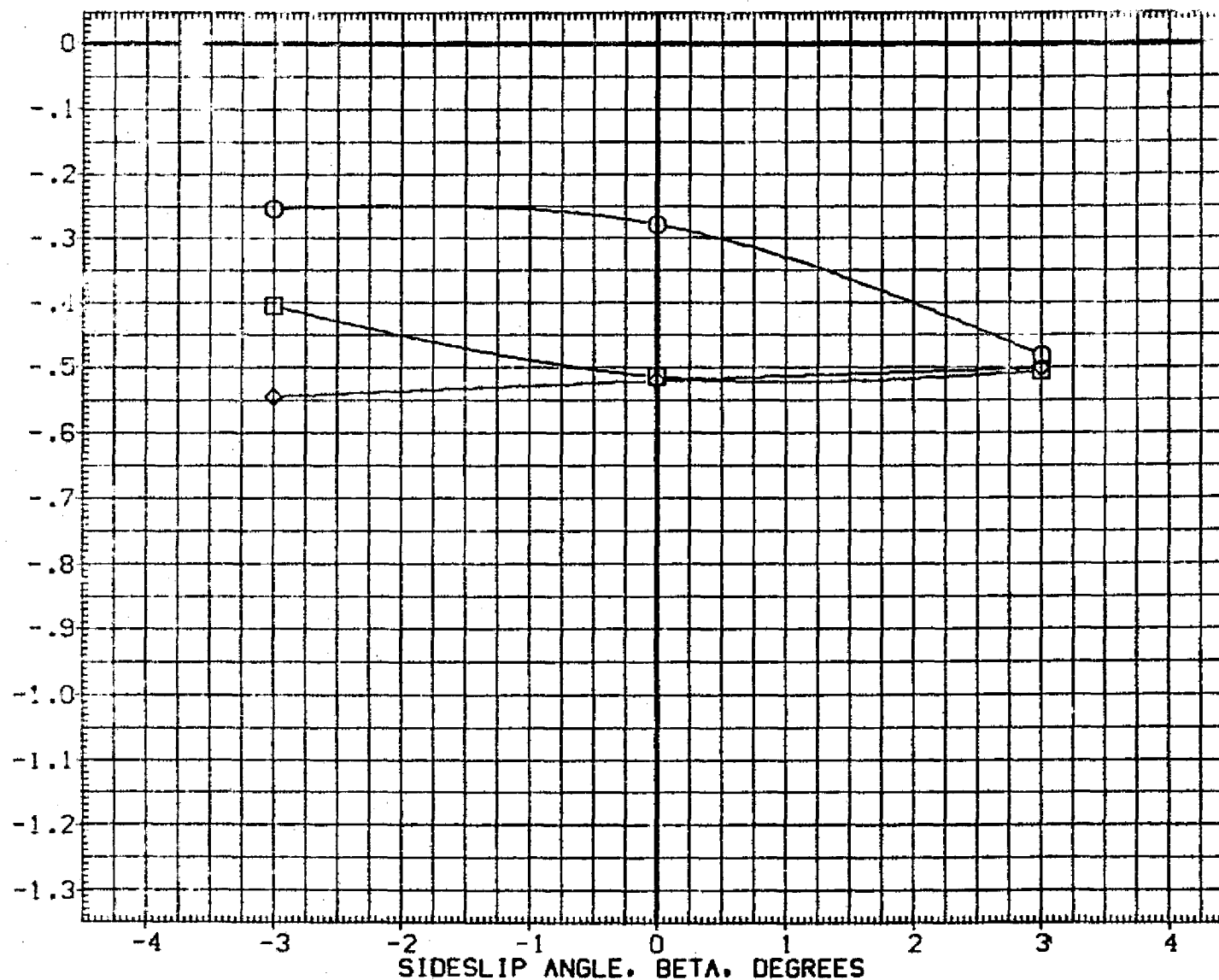


FIGURE 84. AMPLIFICATION FACTOR IN YAW, N83 JETS

01N83

LARC CFHT 118 (MA-22)

(CJA213)

SYMBOL	T/OA-1	PARAMETRIC VALUES
○	47.500	MACH 10.330 ALPHA .000
□	95.000	BDFLAP .000 T/OA 142.500
◇	190.000	NO.JET 3.000 ELEVON .000

REFERENCE INFORMATION		
SREF	2690.0000	50.FT.
LREF	474.8000	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - ROLL, N(RM)

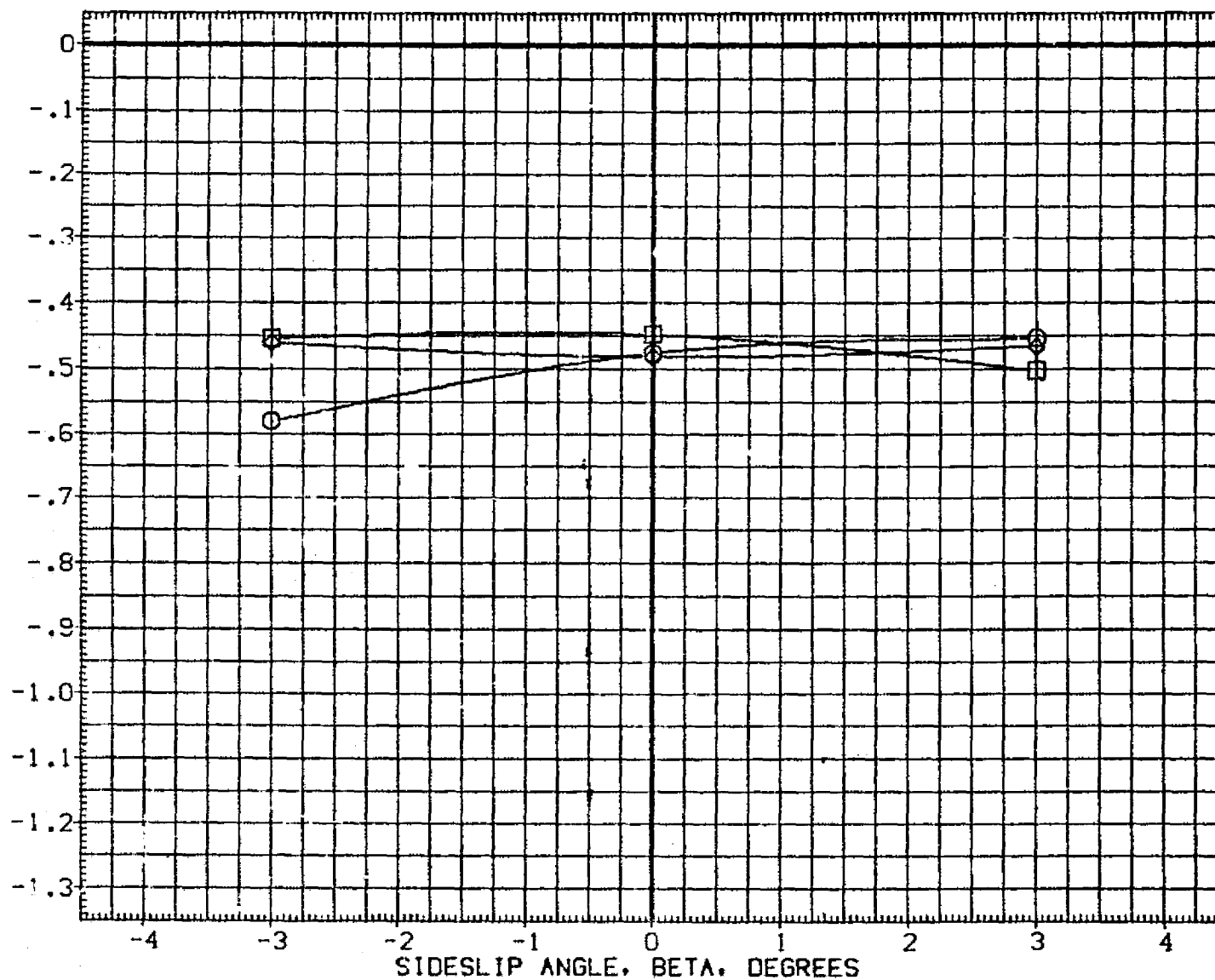


FIGURE 84. AMPLIFICATION FACTOR IN YAW, N83 JETS

01N83

LARC CFHT 118 (MA-22)

(CJA213)

SYMBOL

○
□
◇

T/OA-1

47.500

MACH

PARAMETRIC VALUES

10.330

ALPHA

10.000

BOFLAP

.000

T/OA

142.500

NOJET

3.000

ELEVON

.000

REFERENCE INFORMATION

SREF

2690.0000

SQ. FT.

LREF

1.8000

INCHES

BREF

6.6800

INCHES

XREF

10.57000

IN. X0

YREF

.0000

IN. Y0

ZREF

375.0000

IN. Z0

SCALE

.0100

RCS JET AMPLIFICATION FACTOR - ROLL, N(RM)

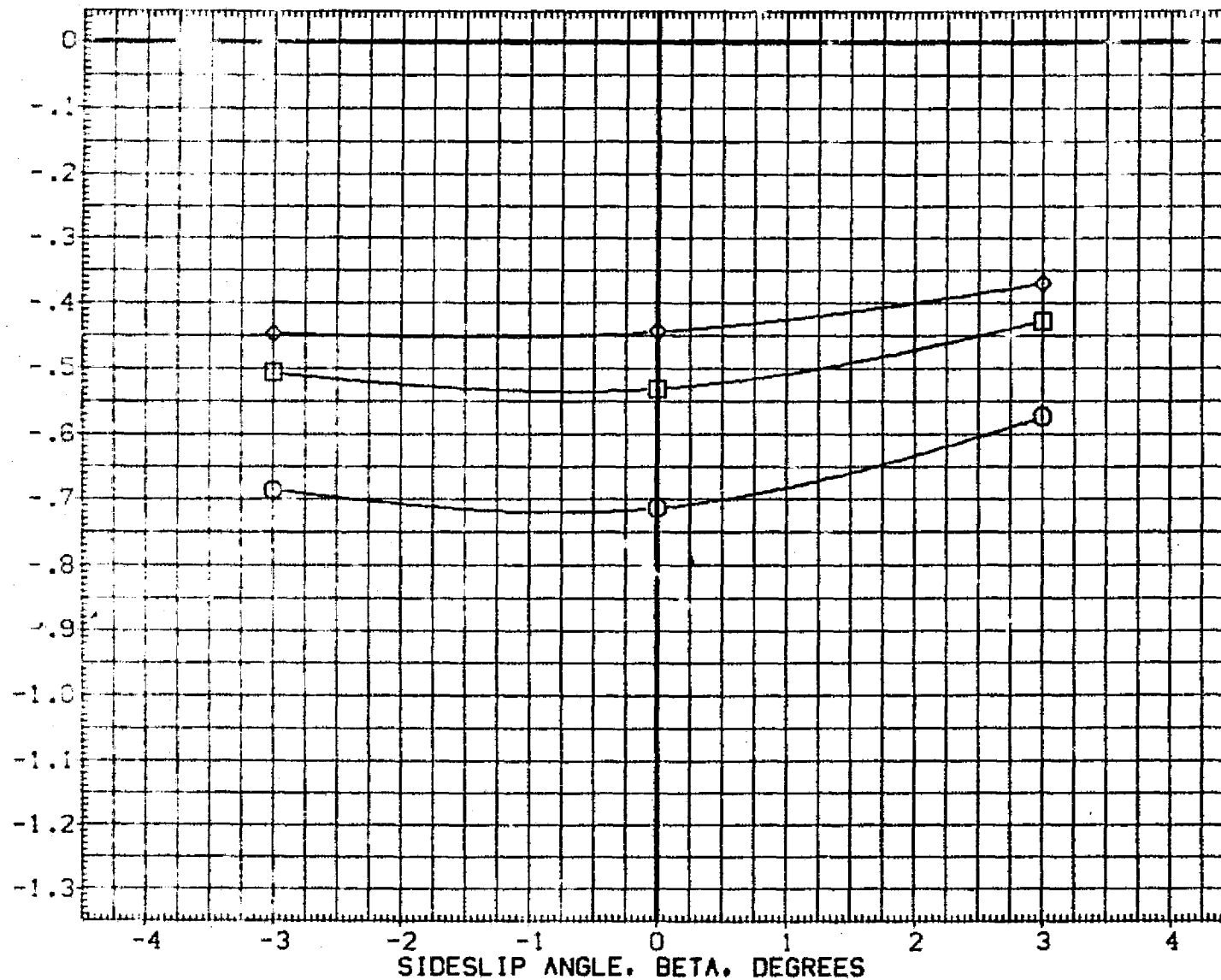


FIGURE 84. AMPLIFICATION FACTOR IN YAW, N83 JETS

01N83

LARC C-HI 118 (MA-22)

(CJA213)

SYMBOL

T/OA-1

PARAMETRIC VALUES

○
□
◇

47.500
95.000
190.000

MACH
BDFLAP
NO JET

10.330
.000
3.000

ALPHA
T/OA
ELEVON

20.000
142.500
.000

REFERENCE INFORMATION

SREF 2690.0000
LREF 474.8000
BREF 936.6800
XMRP 1076.7000
YMRP .0000
ZMRP 375.0000
SCALE .0100

50. FT.
INCHES
INCHES
IN. X0
IN. Y0
IN. Z0

RCS JET AMPLIFICATION FACTOR - ROLL, NCRM

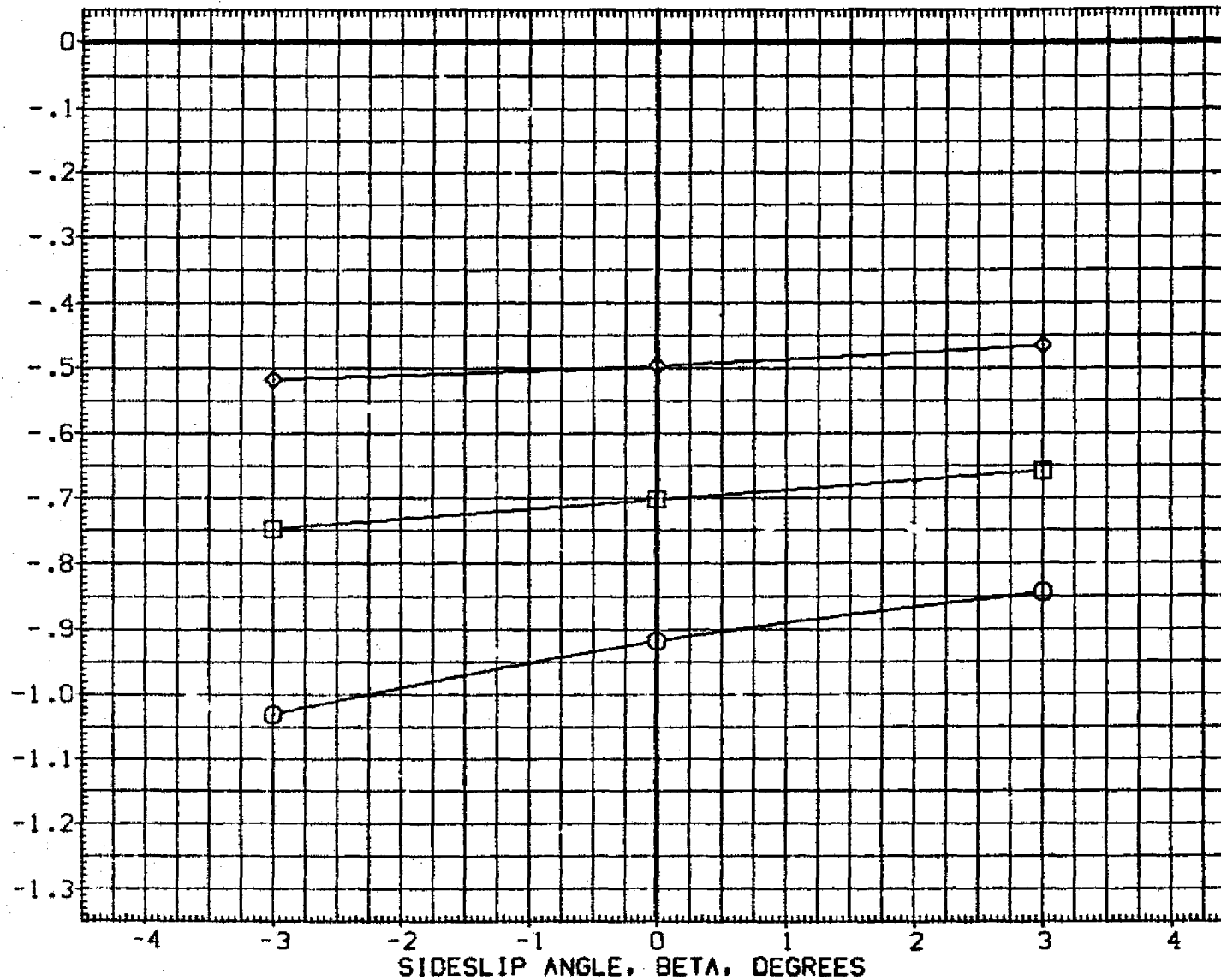


FIGURE 84. AMPLIFICATION FACTOR IN YAW, N83 JETS

01N83

LARC CFHT 118 (MA-22)

(CJA213)

SYMBOL	T/OA-1	MACH	PARAMETRIC VALUES	ALPHA	35.000
○	47.500	BOFLAP	.000	T/OA	142.500
□	95.000	NOJET	3.000	ELEVON	.000
◇	190.000				

REFERENCE INFORMATION

SREF	2690.0000	IN. FT.
LREF	474.8000	IN. FT.
BREF	938.6800	IN. FT.
XREF	1076.7000	IN. FT.
YREF	.0000	IN. FT.
ZREF	375.0000	IN. FT.
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR -- ROLL, N(RM)

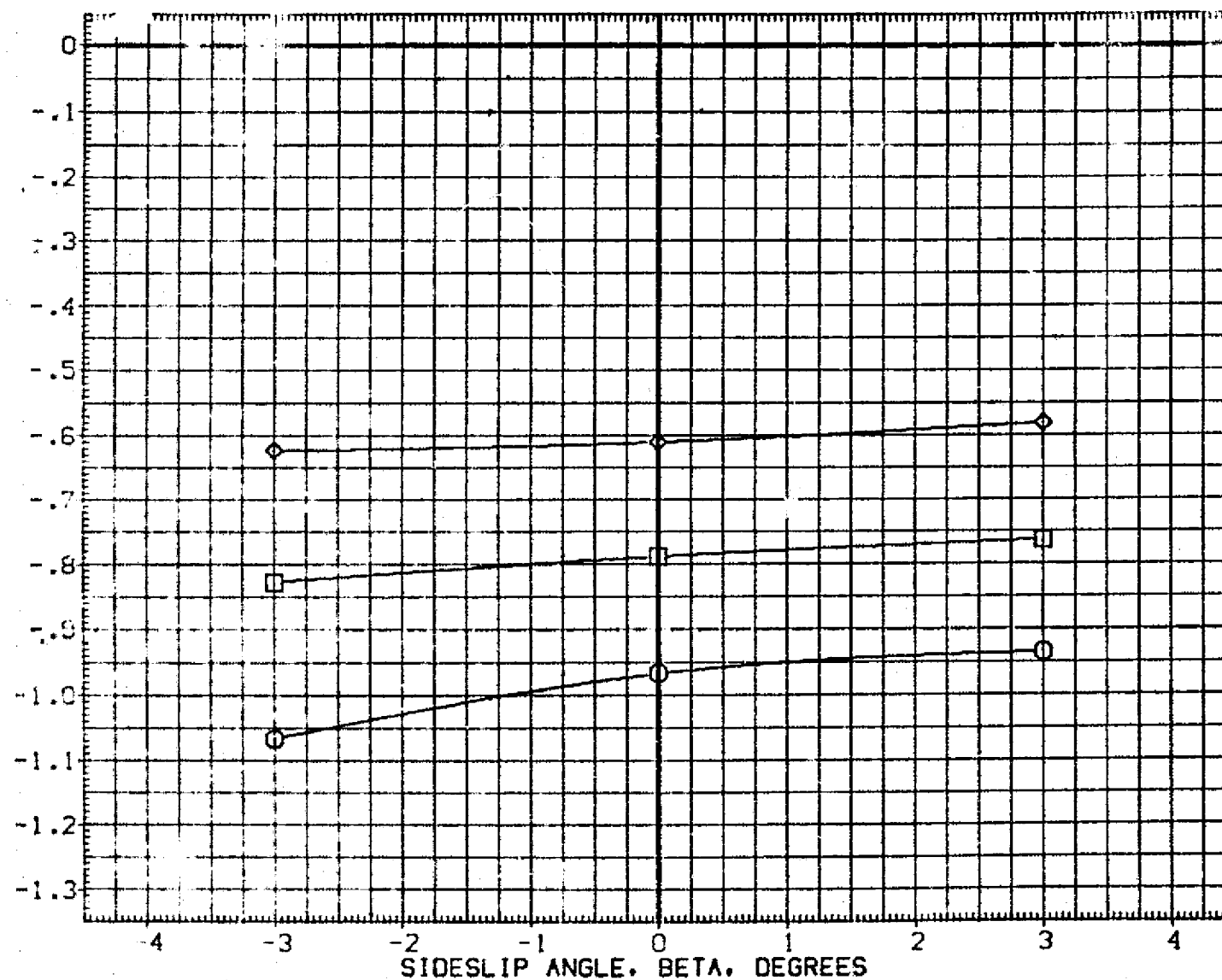


FIGURE 84. AMPLIFICATION FACTOR IN YAW, N83 JETS

01N83

LARC CFHT 116 (MA-22)

(CJA213)

SYMBOL

T/OA-1

PARAMETRIC VALUES

○

47.500

MACH

10.330

ALPHA

-10.000

□

95.000

BOFLAP

.000

T/OA

142.500

◇

190.000

NO.JET

3.000

ELEVON

.000

REFERENCE INFORMATION

SREF

2690.0000

SQ.FT.

LREF

474.8000

INCHES

BREF

936.6800

INCHES

XMRP

1076.7000

IN. X0

YMRP

.0000

IN. Y0

ZMRP

375.0000

IN. Z0

SCALE

.0100

RCS JET AMPLIFICATION FACTOR - YAW, N(°)

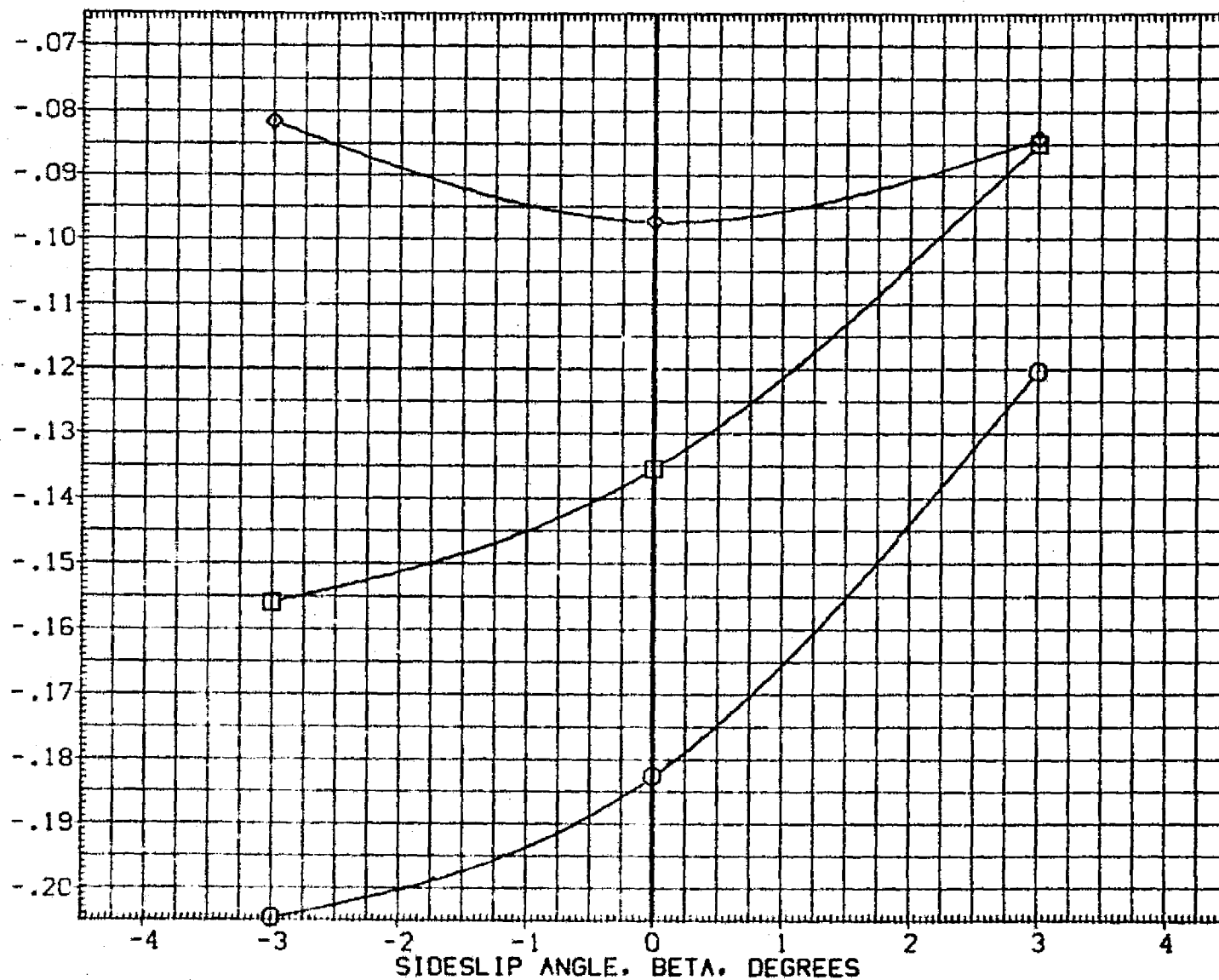


FIGURE 84. AMPLIFICATION FACTOR IN YAW, N83 JETS

SYMBOL	T/OA-1	PARAMETRIC VALUES
○	47.500	MACH 10.330 ALPHA .000
□	95.000	BOFLAP .000 T/OA 142.500
◇	190.000	NO. JET 3.000 ELEVON .000

REFERENCE INFORMATION	
SREF	2690.0000 SQ. FT.
LREF	474.9000 INCHES
BREF	936.6800 INCHES
XPR	1076.7000 IN. X
YPR	.0000 IN. Y
ZPR	375.0000 IN. Z
SCALE	.0100

RCS JET AMPLIFICATION FACTOR - YAW, N(VM)

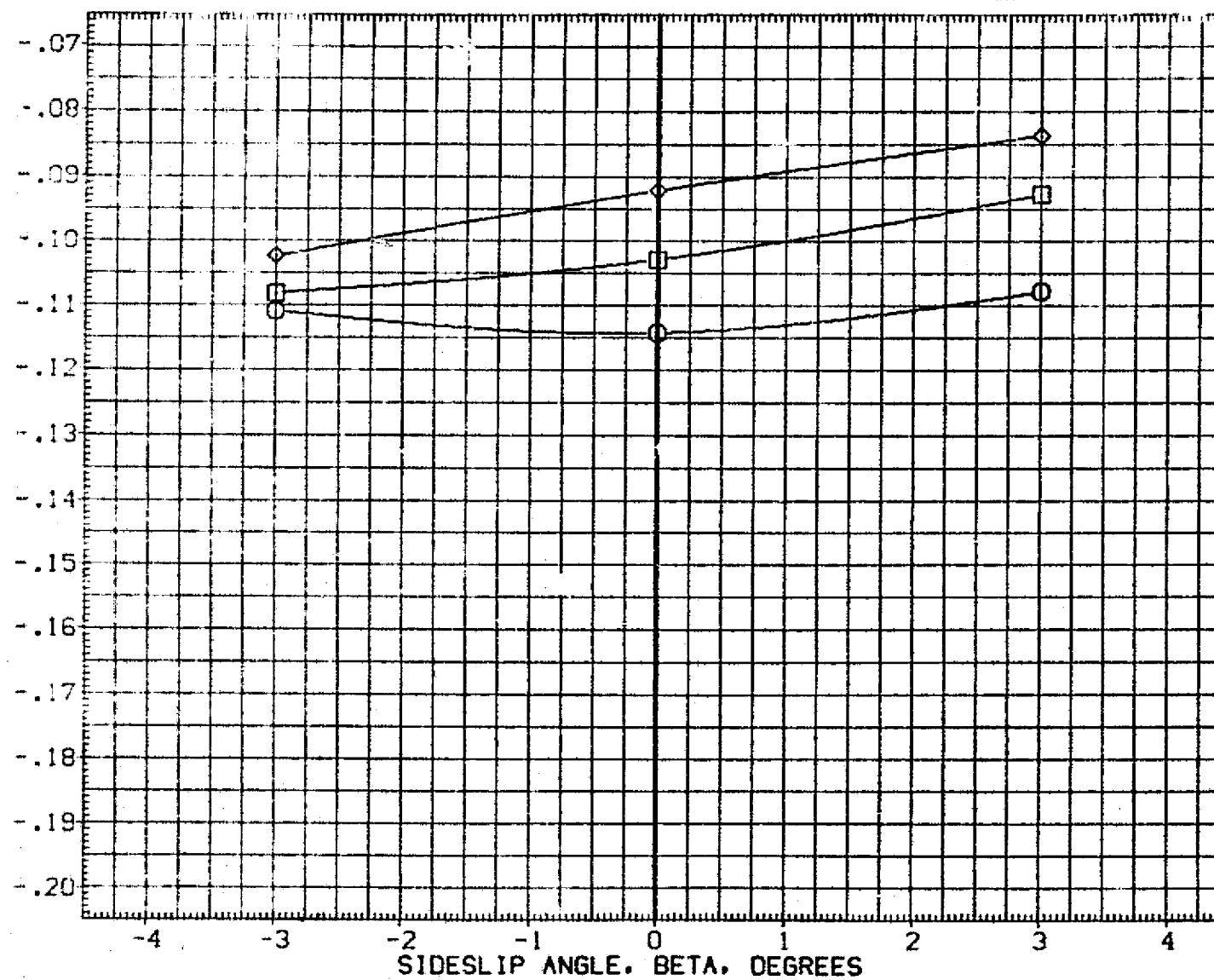


FIGURE 84. AMPLIFICATION FACTOR IN YAW, N83 JETS

01N83

LARC CFHT 118 (MA-22)

(CJA213)

SYMBOL	T/QA-1	MACH	PARAMETRIC VALUES	ALPHA	10.000
○	47.500	80FLAP	.000	T/QA	142.500
□	95.000	NOJET	3.000	ELEVON	.000
◇	190.000				

REFERENCE INFORMATION		
SREF	2690.0000	50.FT.
LREF	474.8000	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - YAW, NCYM)

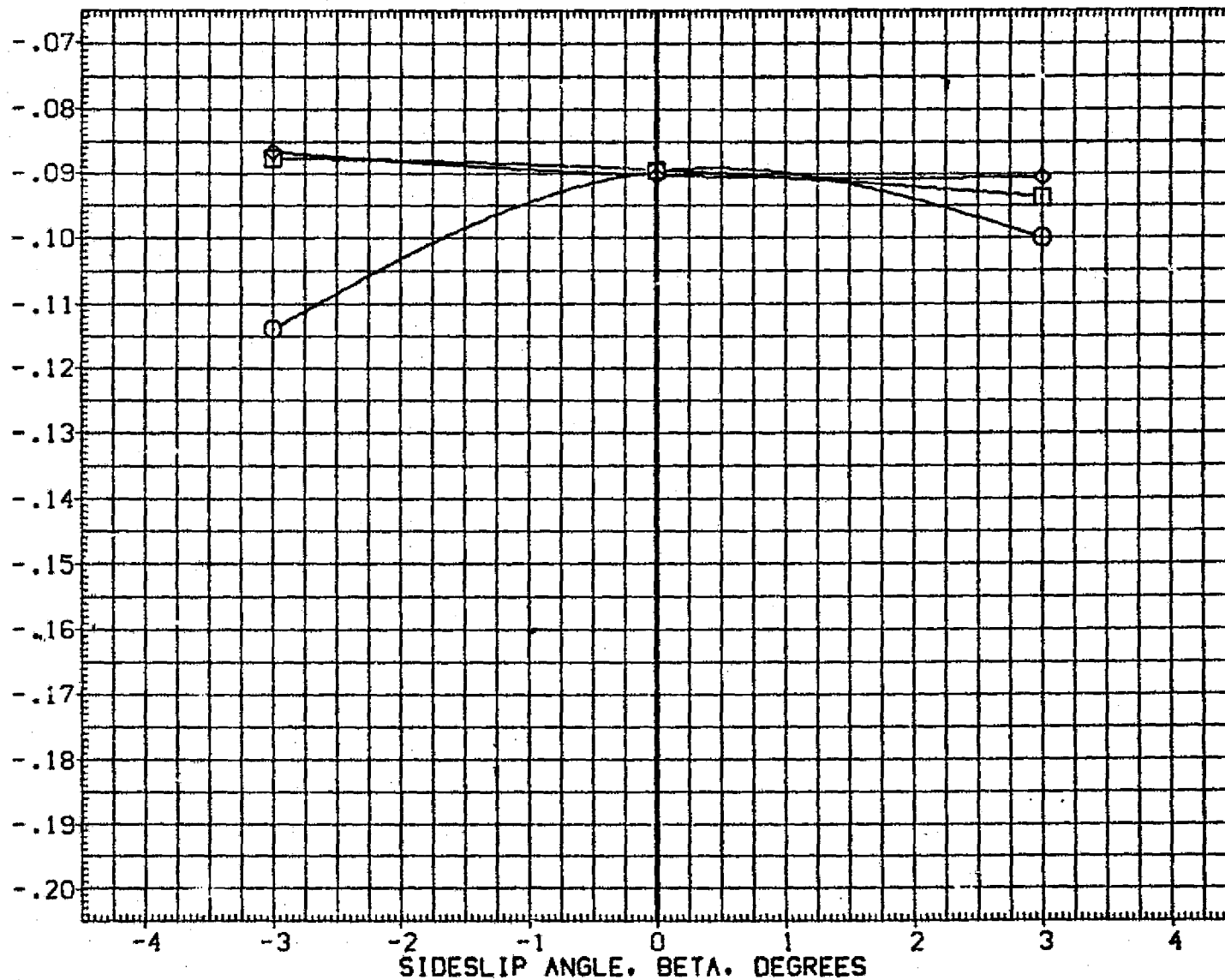


FIGURE 84. AMPLIFICATION FACTOR IN YAW, N83 JETS

01N83

LARC CFHT 118 (MA-22)

(CJA213)

SYMBOL

○
□
◇

T/QA-1

47.500

95.000

190.000

MACH

BDFLAP

NO JET

PARAMETRIC VALUES

10.330

.000

3.000

ALPHA

T/QA

ELEVON

20.000

142.500

.000

REFERENCE INFORMATION

SREF 2650.0000

LREF 11.8000

BREF 936.6800

XREF 1076.7000

YREF .0000

ZREF 375.0000

SCALE .0100

SQ.FT.

INCHES

IN. X0

IN. Y0

IN. Z0

RCS JET AMPLIFICATION FACTOR - YAW, NCYM

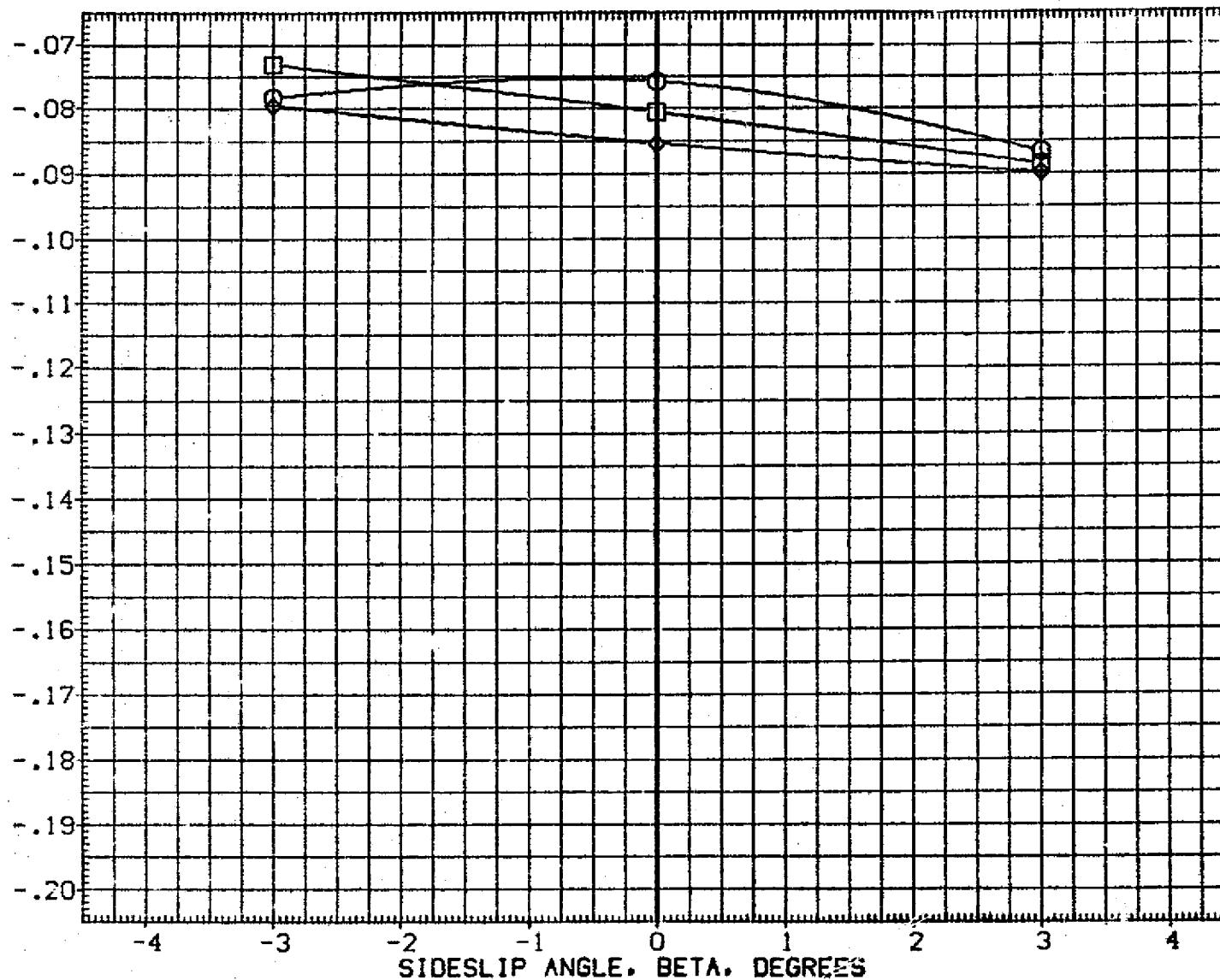


FIGURE 84. AMPLIFICATION FACTOR IN YAW, N83 JETS

01N83

LARC CFHT 118 (MA-22)

(CJA213)

SYMBOL	T/QA-1	PARAMETRIC VALUES			
○	47.500	MACH	10.330	ALPHA	35.000
□	95.000	BDFLAP	.000	T/QA	142.500
◇	190.000	NO. JET	3.000	ELEVON	.000

REFERENCE INFORMATION		
SREF	2690.0000	50. FT.
LREF	474.8000	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - YAW, N(YM)

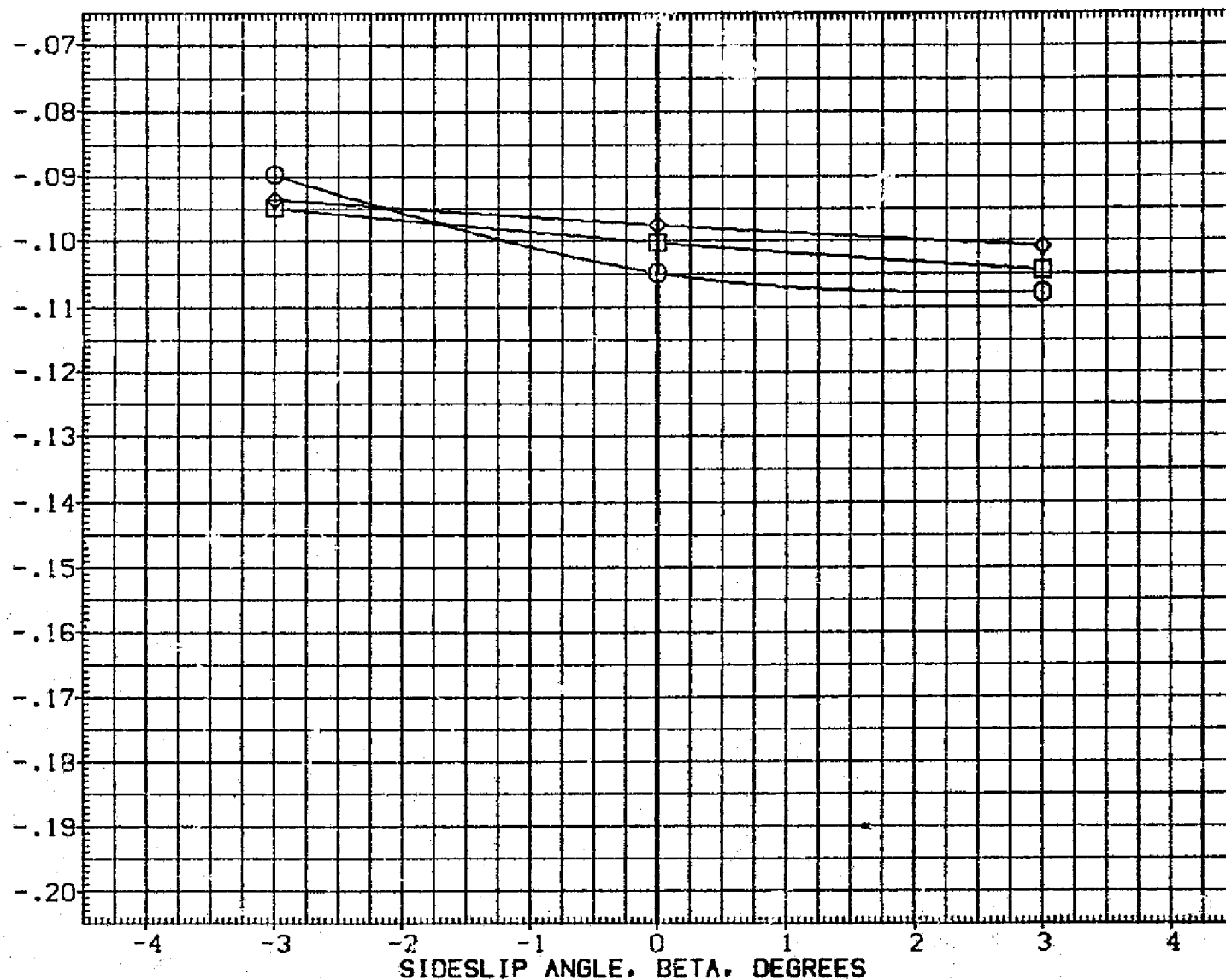


FIGURE 84. AMPLIFICATION FACTOR IN YAW, N83 JETS

SYMBOL

T/QA-1

PARAMETRIC VALUES

○
□
◇

47.500
95.000
190.000

MACH
BDFLAP
NOJET

10.330
.000
3.000

ALPHA
T/QA
ELEVON

-10.000
42.500
.000

REFERENCE INFORMATION

SREF 2690.0000 IN. FT.
LRFF 474.6000 INCHES
SREF 936.6600 INCHES
XREF 1076.7000 IN. X0
YREF .0000 IN. Y0
ZREF 375.0000 IN. Z0
SCALE .0100

RCS JET AMPLIFICATION FACTOR - NORMAL FORCE, N(NF)

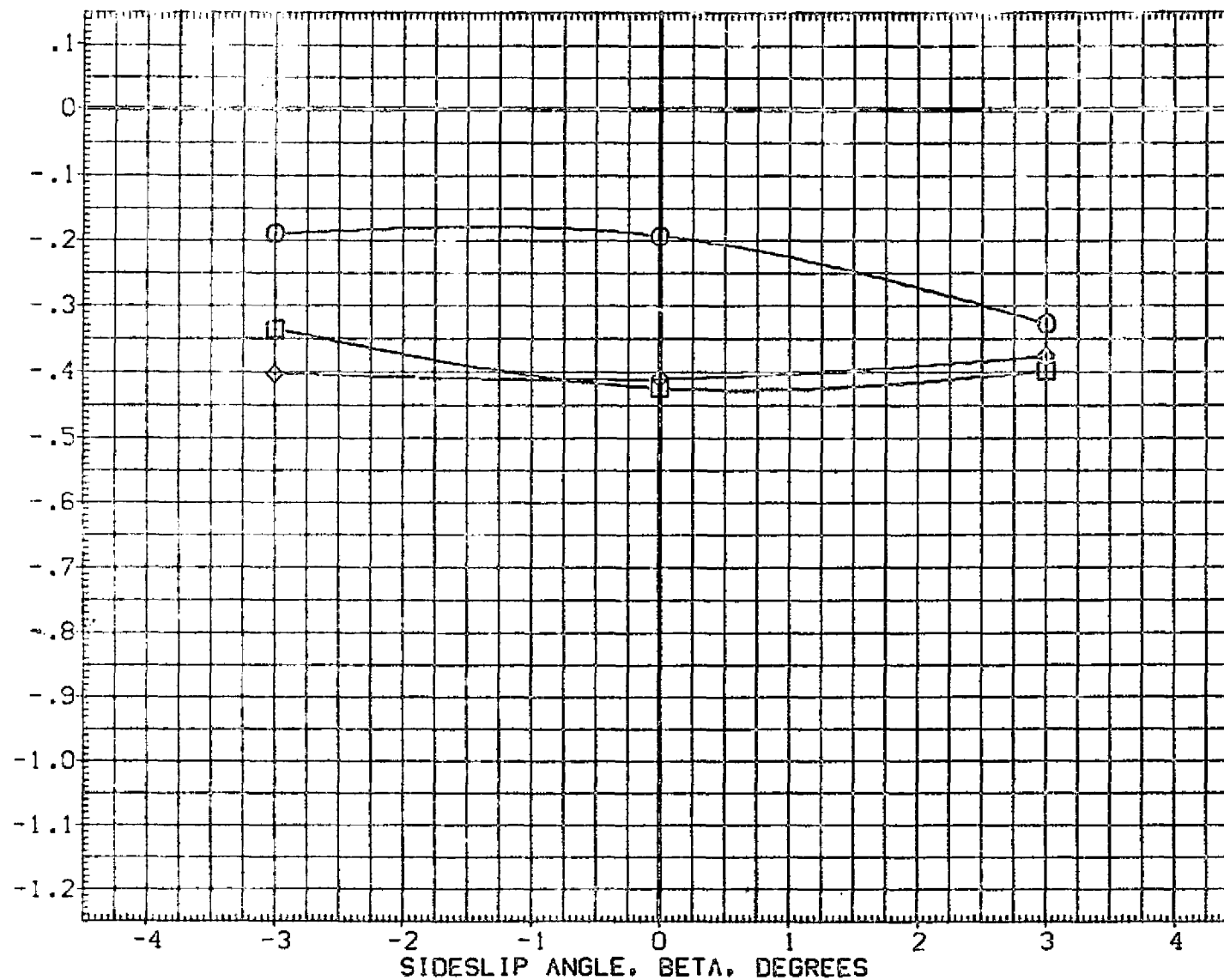


FIGURE 84. AMPLIFICATION FACTOR IN YAW, N83 JETS

01N83

LARC CFHT 118 (MA-22)

(CJA213)

SYMBOL

T/OA-1

PARAMETRIC VALUES

○

47.500

MACH

10.330

ALPHA

.000

□

95.000

BD FLAP

.000

T/OA

142.500

◇

190.000

NO. JET

3.000

ELEVON

.000

REFERENCE INFORMATION

SREF

2690.0000

SQ. FT.

LREF

474.8000

INCHES

BREF

936.6800

INCHES

XMRP

1076.7000

IN. X0

YMRP

.0000

IN. Y0

ZMRP

375.0000

IN. Z0

SCALE

.0100

RCS JET AMPLIFICATION FACTOR - NORMAL FORCE, N(NF)

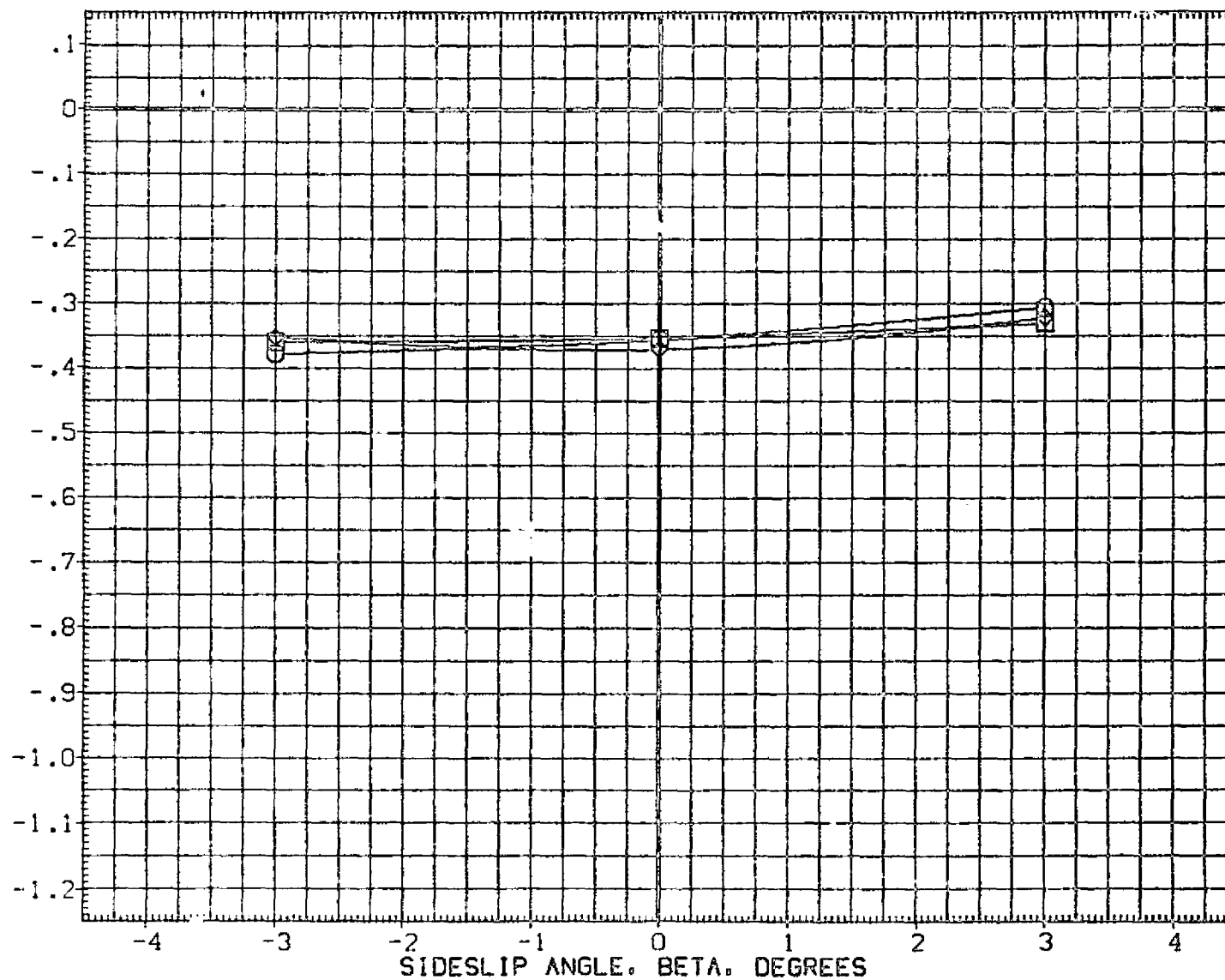


FIGURE 84. AMPLIFICATION FACTOR IN YAW, N83 JETS

SYMBOL		PARAMETRIC VALUES				
○	1/0A-1	47.500	MACH	10.330	ALPHA	10.000
□		95.000	BDFLAP	.000	1/0A	142.500
◇		190.000	NO.JET	3.000	ELEVON	.000

REFERENCE INFORMATION		
SREF	2650.0000	1.FT.
LREF	474.8000	INCHES
BREF	936.6000	INCHES
XMRP	1076.7000	IN. Y0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - NORMAL FORCE, N(NF)

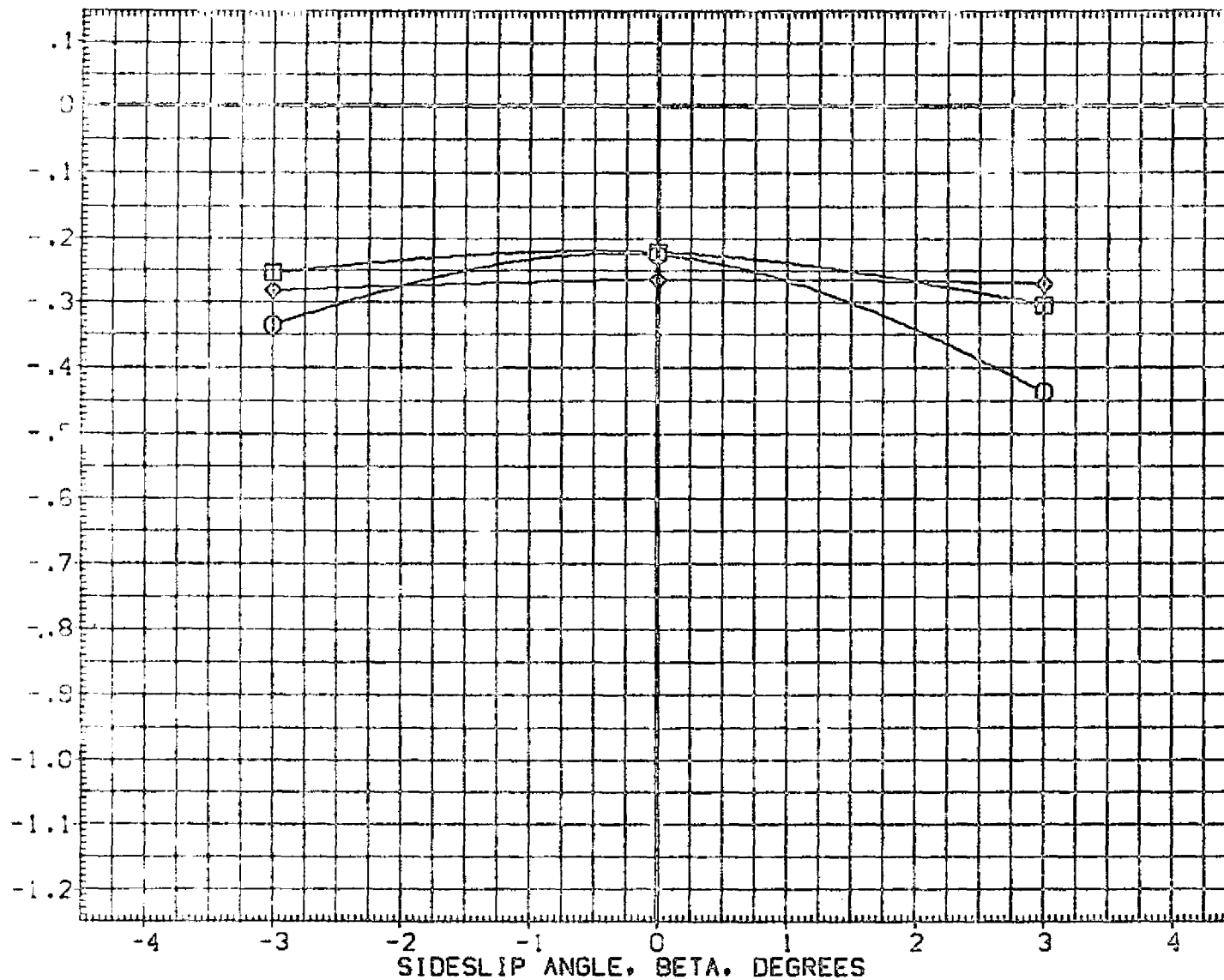


FIGURE 84. AMPLIFICATION FACTOR IN YAW, N83 JETS

01N93

LARC CFHT 118 (MA-22)

(CJA213)

SYMBOL

T/OA-1

PARAMETRIC VALUES

○

47.500

MACH

10.330

ALPHA

20.000

□

95.000

BOFLAP

.000

T/OA

142.500

◇

190.000

NOJET

3.000

ELEVON

.000

REFERENCE INFORMATION

SREF

2690.0000

SQ.FT.

LREF

474.8000

INCHES

BREF

936.6800

INCHES

XMRP

1076.7000

IN. X0

YMRP

.0000

IN. Y0

ZMRP

375.0000

IN. Z0

SCALE

.0100

RCS JET AMPLIFICATION FACTOR - NORMAL FORCE, N(NF)

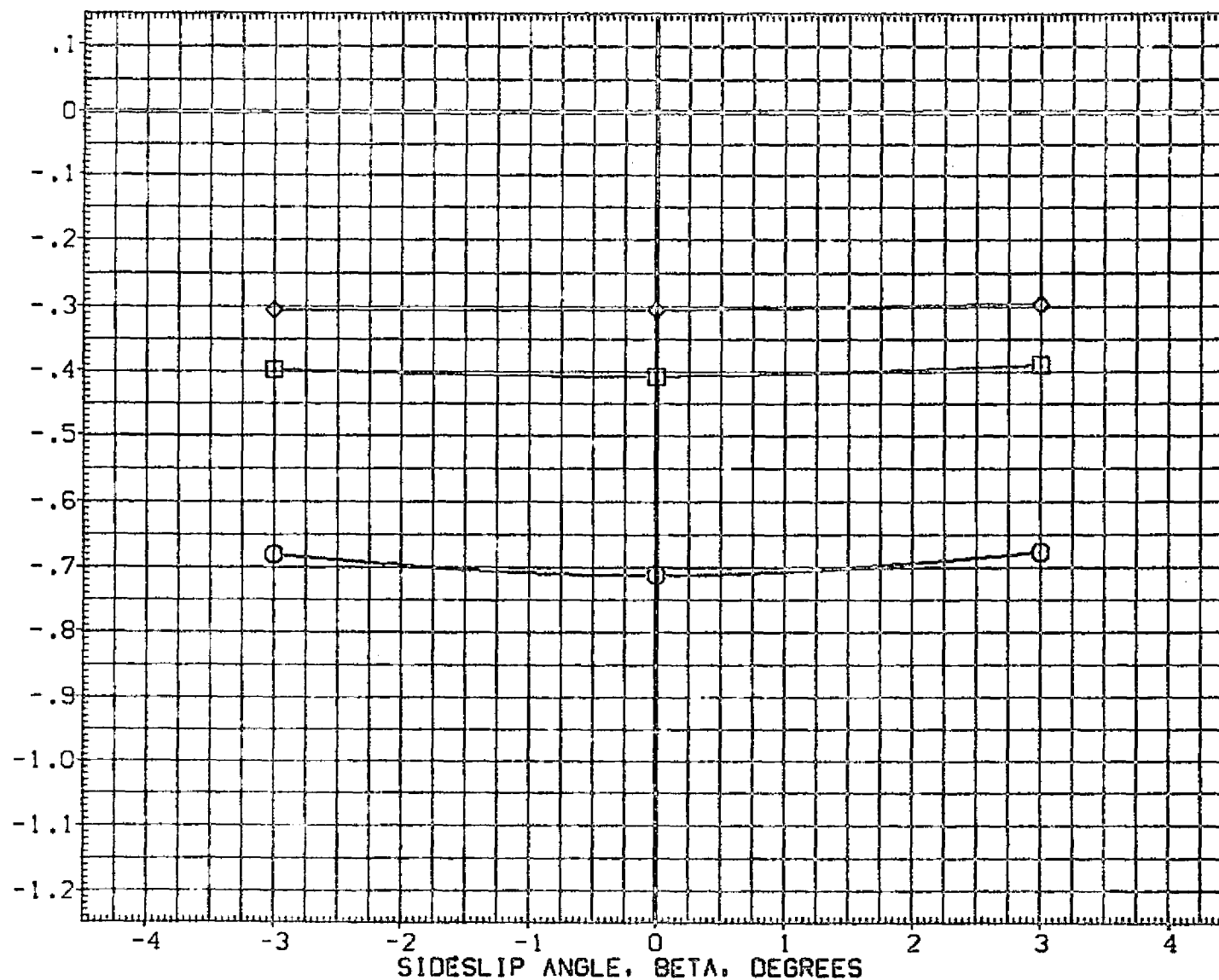


FIGURE 84. AMPLIFICATION FACTOR IN YAW, N83 JETS

01N93

LARC CFHT 118 (MA-22)

(CJA213)

SYMBOL

T/OA-1

PARAMETRIC VALUES

○
□
◇

47.500

MACH

10.330

ALPHA

35.000

95.000

BOFLAP

.000

T/OA

142.500

190.000

NOJET

3.000

ELEVON

.000

REFERENCE INFORMATION

SREF

2000.0000

80.00

LREF

474.0000

45.00

BREF

936.6000

45.00

XMRP

1076.7000

45.00

YMRP

.0000

45.00

ZMRP

375.0000

45.00

SCALE

.0100

RCS JET AMPLIFICATION FACTOR - NORMAL FORCE, N(NF)

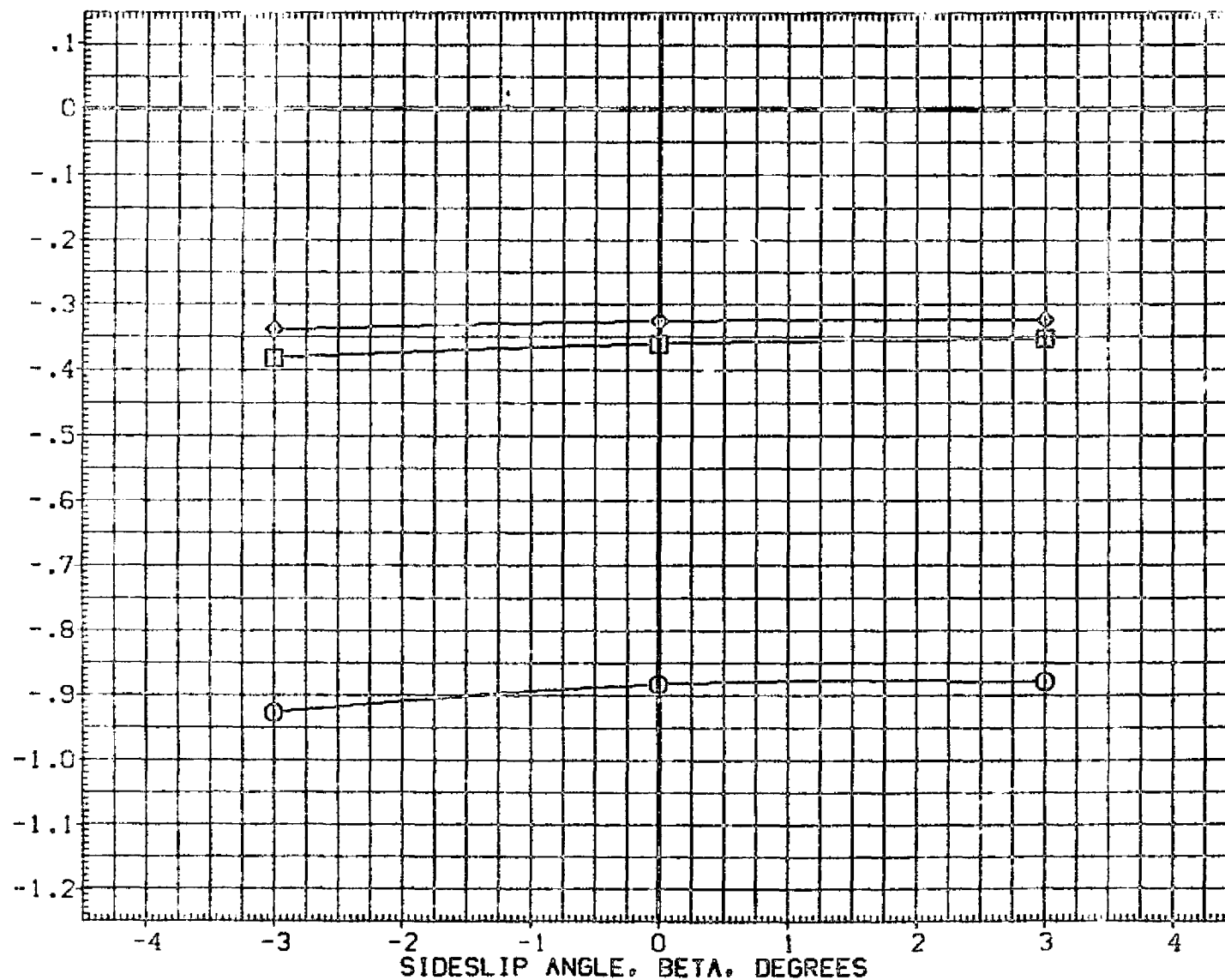


FIGURE 84. AMPLIFICATION FACTOR IN YAW, N83 JETS

01N83

LARC CFHT 118 (MA-22)

(CJA213)

SYMBOL	T/QA-1	PARAMETRIC VALUES			
○	47.500	MACH	10.330	ALPHA	-10.000
□	95.000	BDFLAP	.000	T/QA	142.500
◇	190.000	NOJET	3.000	ELEVON	.000

REFERENCE INFORMATION		
SREF	2650.0000	SQ.FT.
LREF	474.8000	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0100	

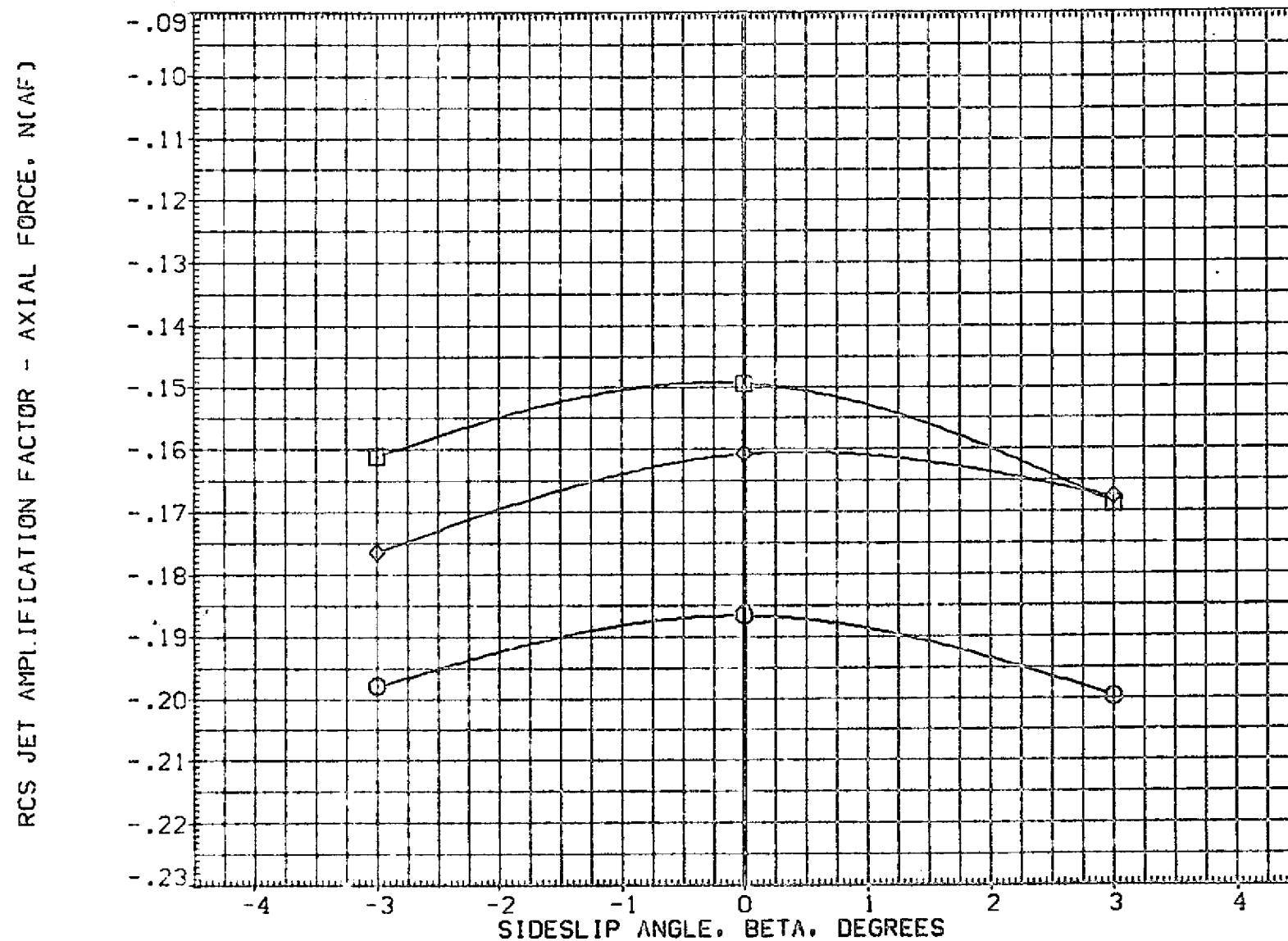


FIGURE 84. AMPLIFICATION FACTOR IN YAW, N83 JETS

SYMBOL	T/QA-1	PARAMETRIC VALUES
○	47.500	MACH 10.330 ALPHA .000
□	95.000	BDCLAP .000 T/QA 142.500
◇	190.000	NO. 257 3.000 ELEVON .000

REFERENCE INFORMATION	
SREF	2550.0000 SO. FT.
LREF	174.0000 INCHES
B REF	936.6600 INCHES
XGRP	1076.7000 IN. X0
YGRP	.0000 IN. Y0
ZGRP	375.0000 IN. Z0
SCALE	.0100

RCS JET AMPLIFICATION FACTOR - AXIAL FORCE, N(AF)

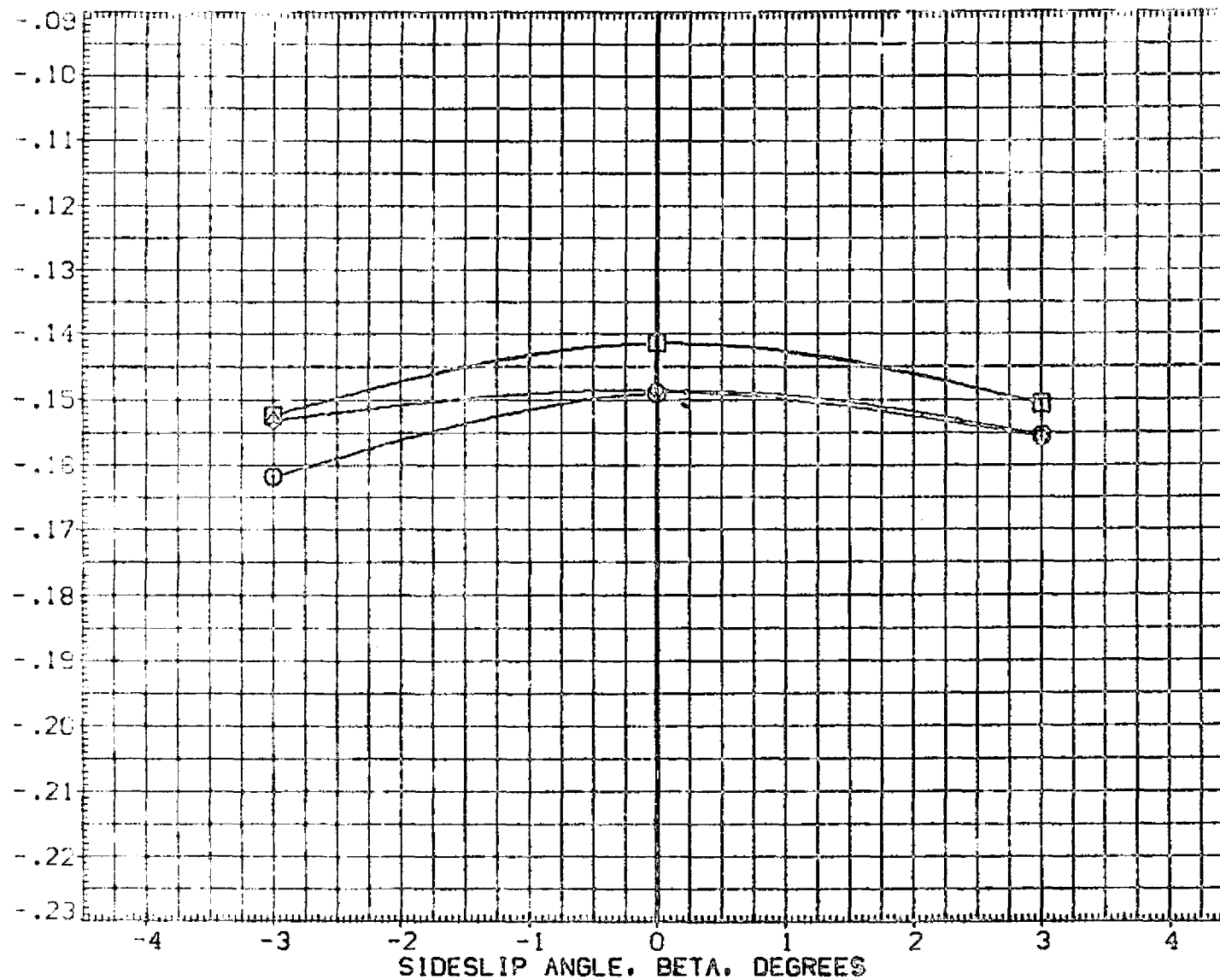


FIGURE 84. AMPLIFICATION FACTOR IN YAW, N83 JETS

01N83

LARC CFHT 118 (MA-22)

(CJA213)

SYMBOL

○
□
◇

T/OA-1

47.500

MACH

BDFLAP

N3.JET

PARAMETRIC VALUES

10.330

ALPHA

T/OA

ELEVON

10.000

142.500

.000

REFERENCE INFORMATION

SREF

LREF

BREF

XMRP

YMRP

ZMRP

SCALE

2580.0000

474.0000

936.6600

1076.7000

.0000

375.0000

.0100

90.FT.

INCHES

INCHES

IN. X0

IN. Y0

IN. Z0

RCS JET AMPLIFICATION FACTOR - AXIAL FORCE, N(AF)



FIGURE 84. AMPLIFICATION FACTOR IN YAW, N83 JETS

SYMBOL	T/OA-1	PARAMETRIC VALUES
○	47.500	MACH 10.330 ALPHA 20.000
□	95.000	80FLAP .000 T/OA 142.500
◇	190.000	NO. JET 3.000 ELEVON .000

REFERENCE INFORMATION	
SREF	2650.0000 SQ. FT.
LREF	474.8000 INCHES
BREF	936.6800 INCHES
XMCP	1076.7000 IN. X0
YMCP	.0000 IN. Y0
ZMCP	375.0000 IN. Z0
SCALE	.0100

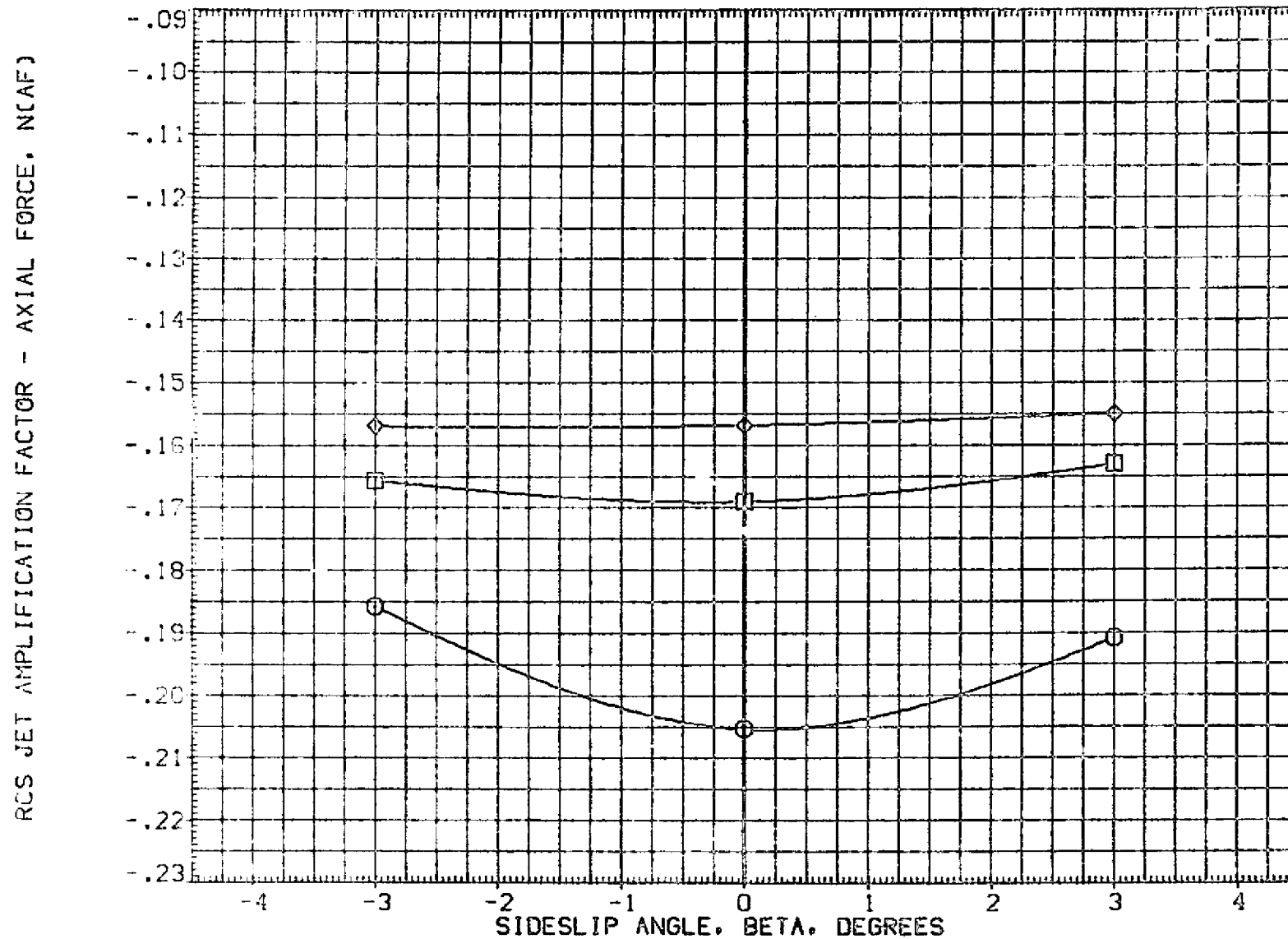


FIGURE 84. AMPLIFICATION FACTOR IN YAW, N83 JETS

01N83

LARC CFHT 118 (MA-22)

(CJA213)

SYMBOL

◇ □ ○

T/QA-I

47.500

95.000

190.000

MACH

9DFLAP

NOJET

PARAMETRIC VALUES

10.330

.000

3.000

ALPHA

T/QA

ELEVON

35.000

142.500

.000

REFERENCE INFORMATION

SREF 2690.0000

LREF 474.8000

BREF 936.6800

XMRP 1076.7000

YMRP .0000

ZMRP 375.0000

SCALE .0100

50.FT.

INCHES

INCHES

IN. X0

IN. Y0

IN. Z0

RCS JET AMPLIFICATION FACTOR - AXIAL FORCE, N(AF)

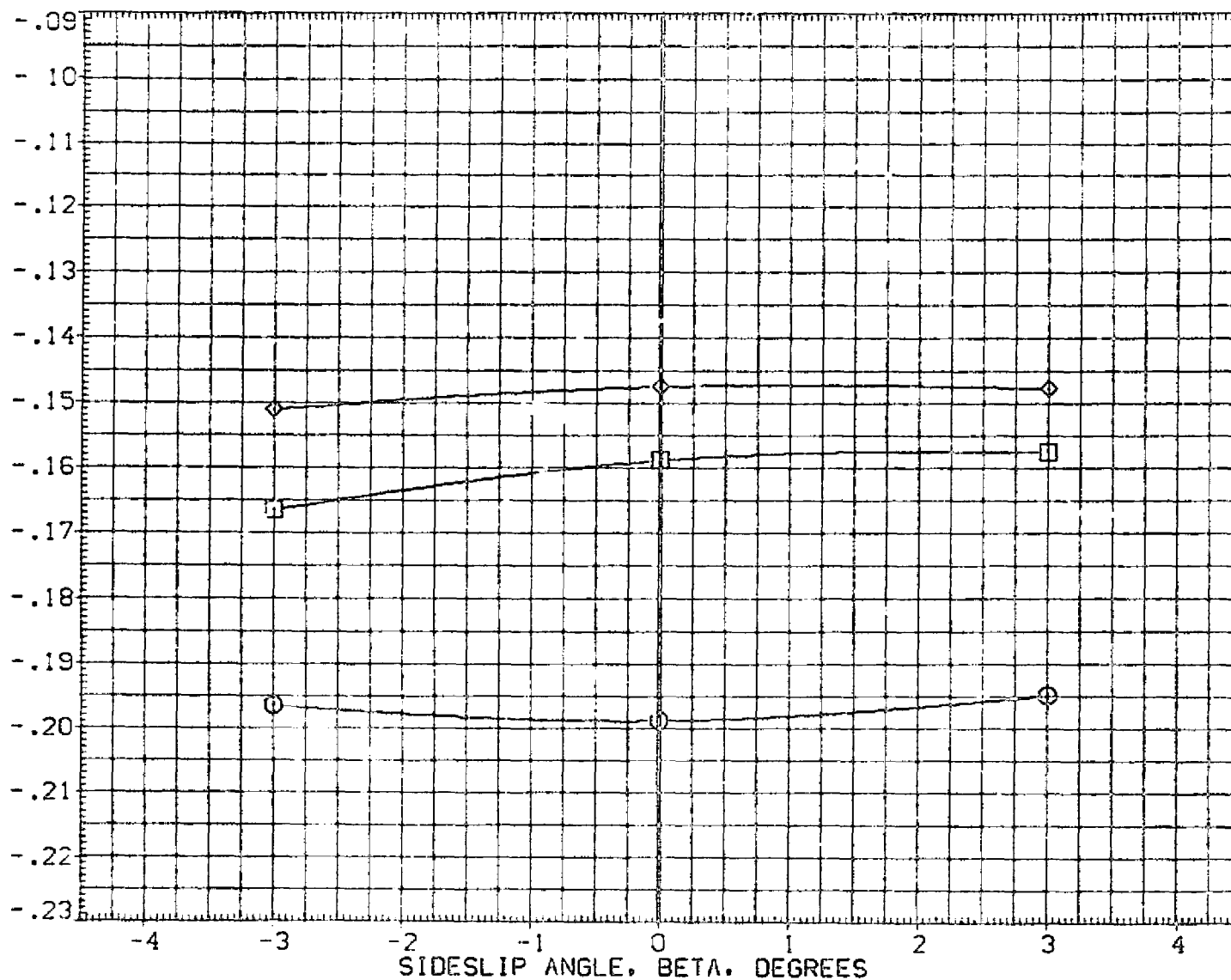


FIGURE 84. AMPLIFICATION FACTOR IN YAW, N83 JETS

SYMBOL

T/QA-1

PARAMETRIC VALUES

○

47.500

MACH

10.330

ALPHA

-10.000

□

95.000

BDPLAP

.000

T/QA

142.500

◇

190.000

NO JET

3.000

ELEVON

.000

REFERENCE INFORMATION

SREF

2690.0000

SQ. FT.

LREF

474.8000

INCHES

BREF

936.6900

INCHES

XMRP

1076.7000

IN. 70

YMRP

.0000

IN. 20

ZMRP

375.0000

SCALE

.0100

RCS JET AMPLIFICATION FACTOR - SIDE FORCE, N(SF)

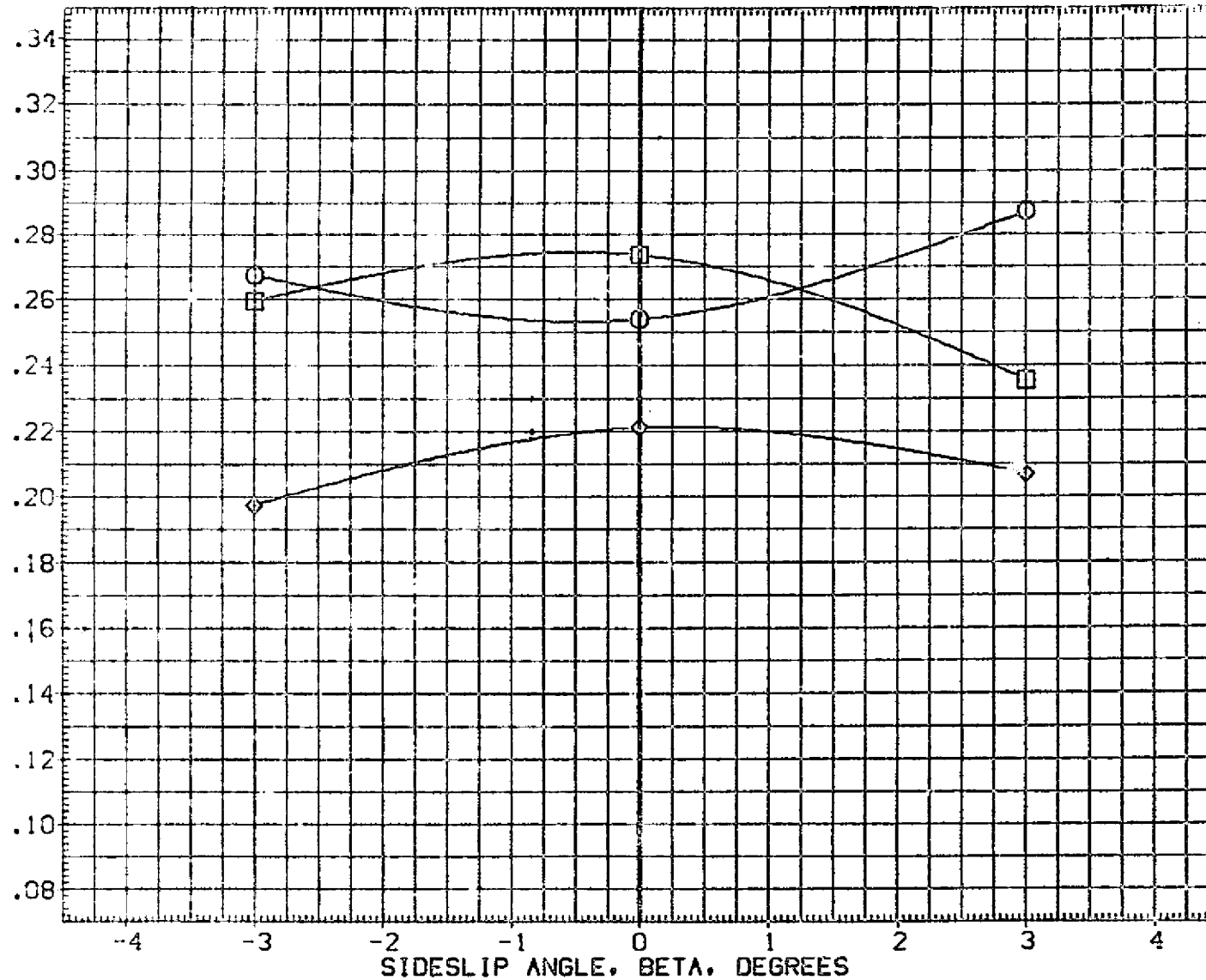


FIGURE 84. AMPLIFICATION FACTOR IN YAW, N83 JETS

01N83

LARC CFHT 118 (MA-22)

(CJA213)

SYMBOL

T/OA-1

PARAMETRIC VALUES

○
□
◇

47.500

MACH

10.330

ALPHA

.000

95.000

BDFLAP

.000

T/OA

142.500

190.000

NOJET

3.000

ELEVON

.000

REFERENCE INFORMATION

SREF

2680.0000

80.FT.

LREF

474.8000

INCHES

GREF

936.6000

INCHES

XMRP

1076.7000

IN. X0

YMRP

.0000

IN. Y0

ZMRP

375.0000

IN. Z0

SCALE

.0100

RCS JET AMPLIFICATION FACTOR - SIDE FORCE, N(SF)

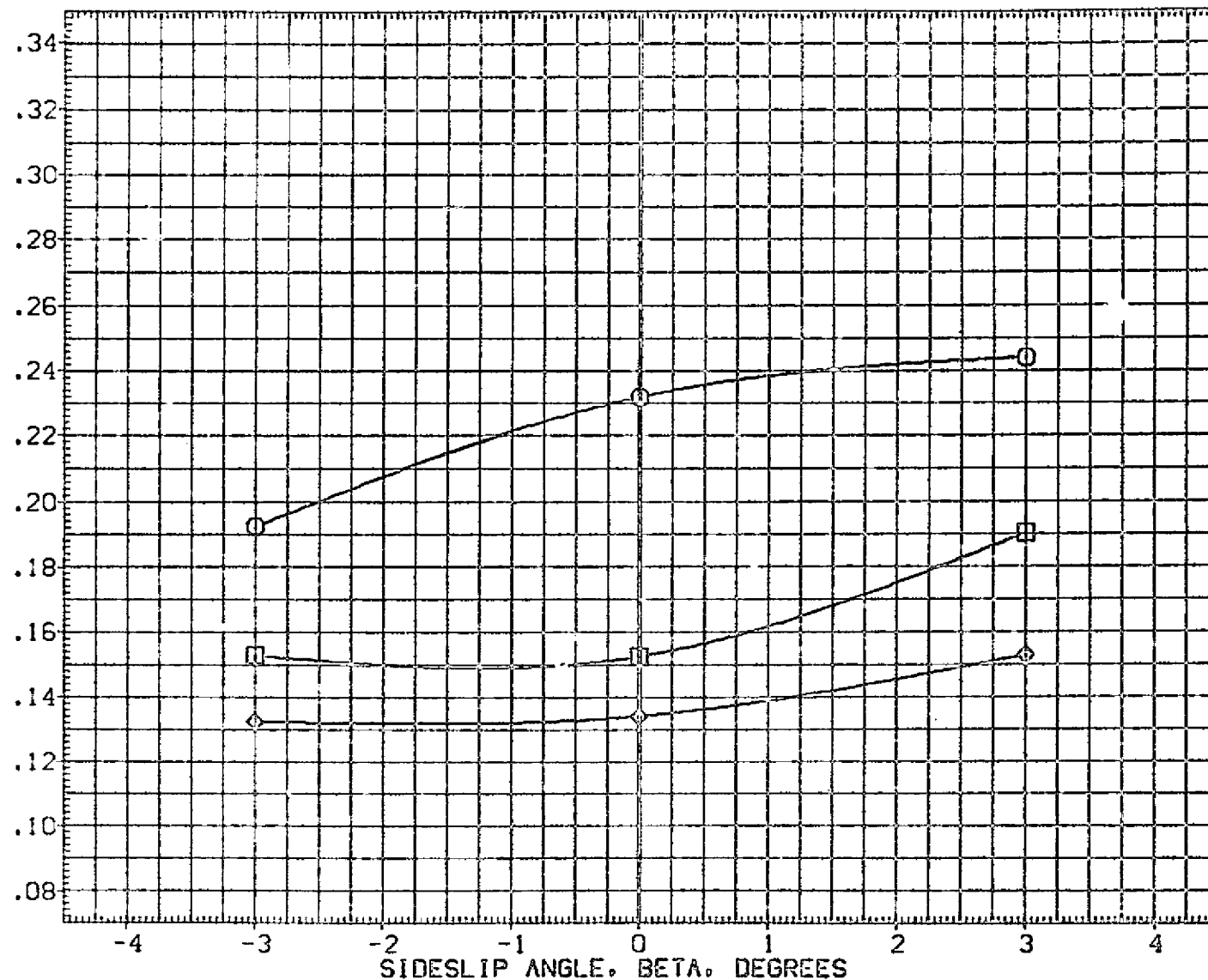


FIGURE 84. AMPLIFICATION FACTOR IN YAW, N83 JETS

SYMBOL



T/OA-1

47.500

MACH

80FLAP

NO.JET

PARAMETRIC VALUES

10.330

ALPHA

T/OA

ELEVON

10.000

142.500

.000

REFERENCE INFORMATION

SREF

2890.0000

SQ.FT.

LREF

474.8000

INCHES

BREF

936.6800

INCHES

XMRP

1076.7000

IN. X0

YMRP

.0000

IN. Y0

ZMRP

375.0000

IN. Z0

SCALE

.0100

RCS JET AMPLIFICATION FACTOR - SIDE FORCE, N(SF)

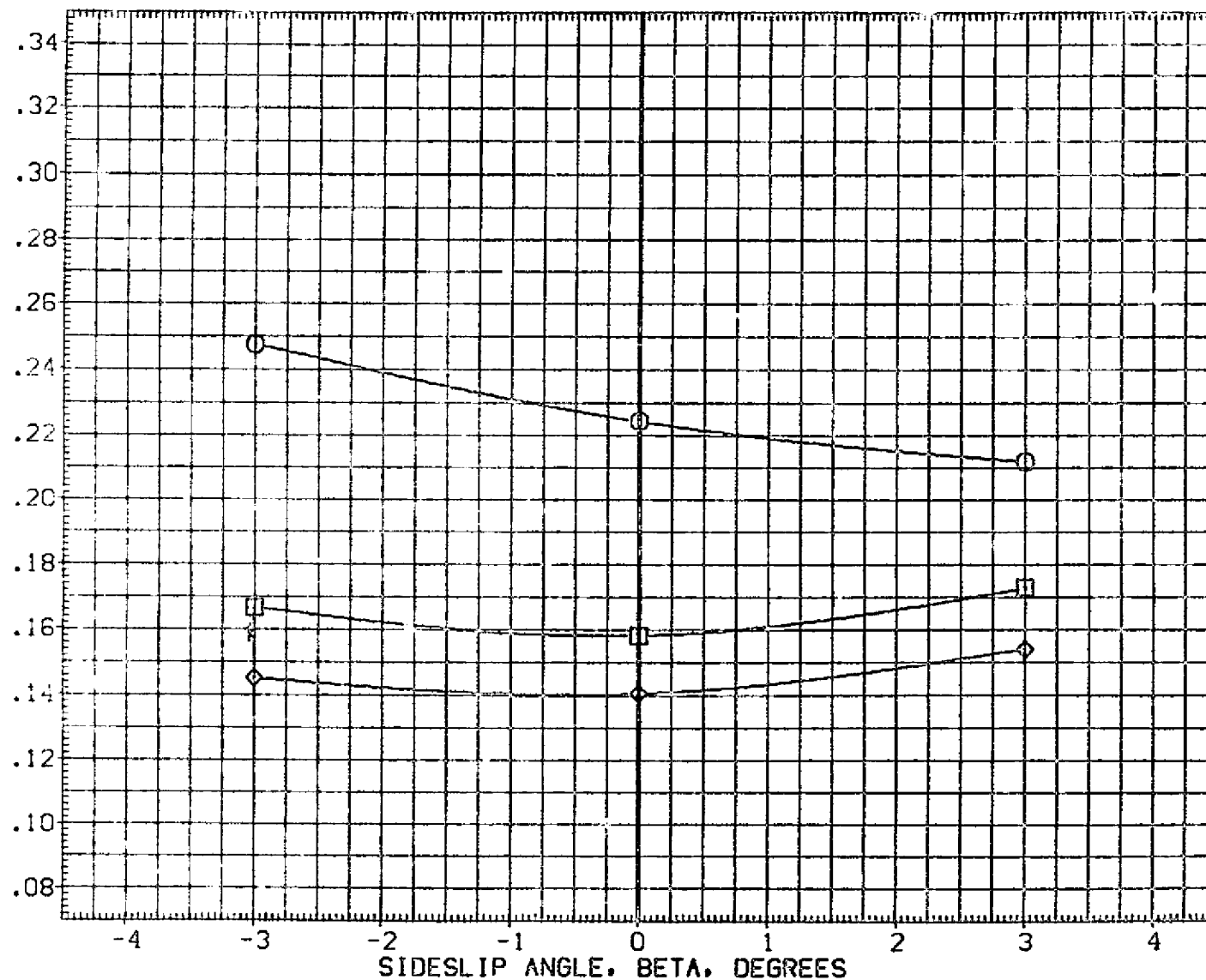


FIGURE 84. AMPLIFICATION FACTOR IN YAW, N83 JETS

01N63

LARC CFHT 118 (MA-22)

(CJA213)

SYMBOL	1/QA-1	PARAMETRIC VALUES			
○	47.500	MACH	10.330	ALPHA	20.000
□	95.000	BDFLAP	.000	1/QA	142.500
◇	190.000	NOJET	3.000	ELEVON	.000

REFERENCE INFORMATION		
SREF	2680.0000	50.FT.
LREF	474.8000	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. XG
YMRP	.0000	IN. YG
ZMRP	375.6000	IN. ZG
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - SIDE FORCE, N(SF)

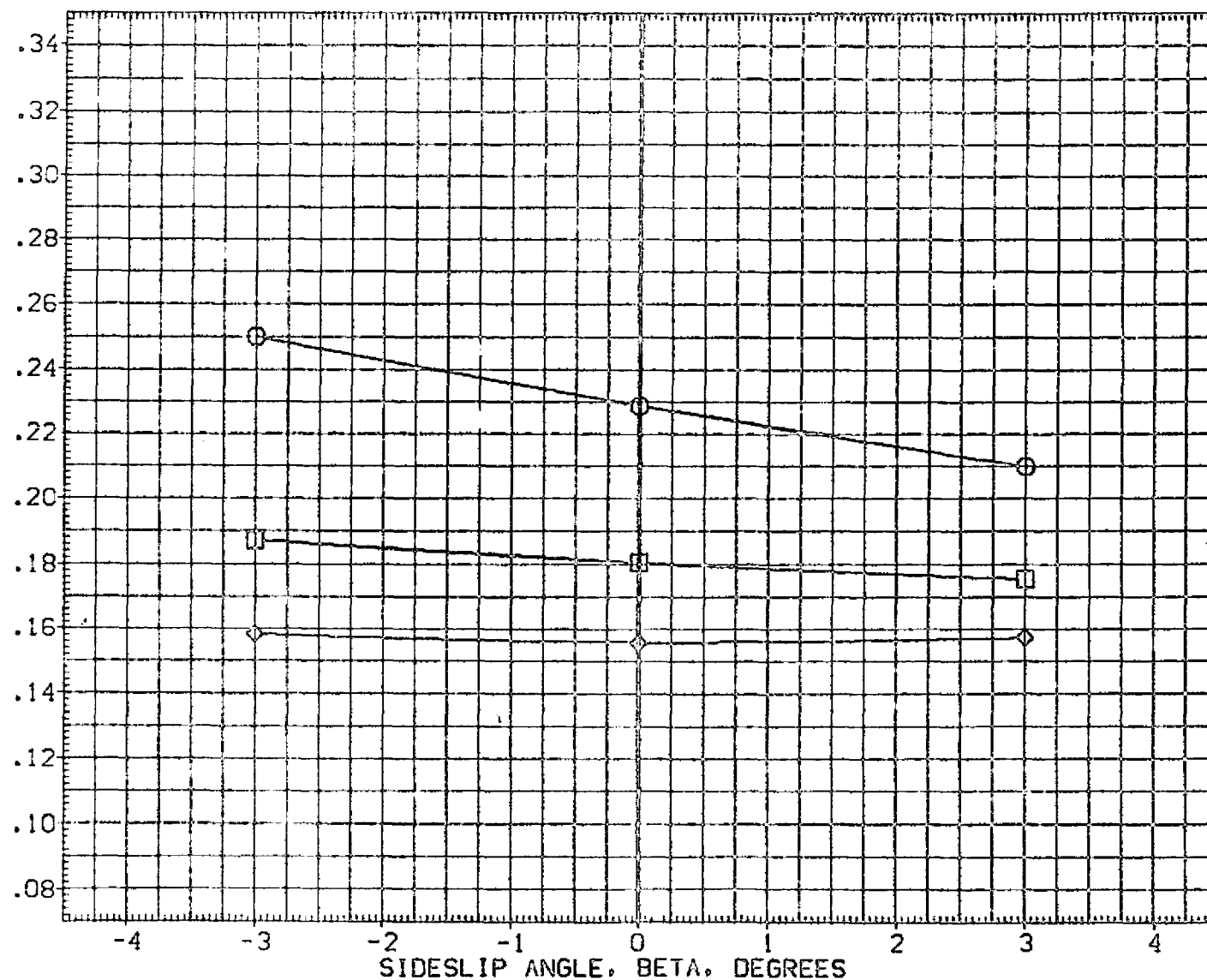


FIGURE 84. AMPLIFICATION FACTOR IN YAW, N83 JETS

SYMBOL	T/QA-1	PARAMETRIC VALUES			
○	47.500	MACH	10.330	ALPHA	35.000
□	95.000	BDFLAP	.000	T/QA	142.500
◇	190.000	NO.JET	3.000	ELEVON	.000

REFERENCE INFORMATION		
SREF	26.0.0000	50.FT.
LREF	4.4.8000	INCHES
BREF	9.5.6800	INCHES
XMRP	1076.7000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0100	

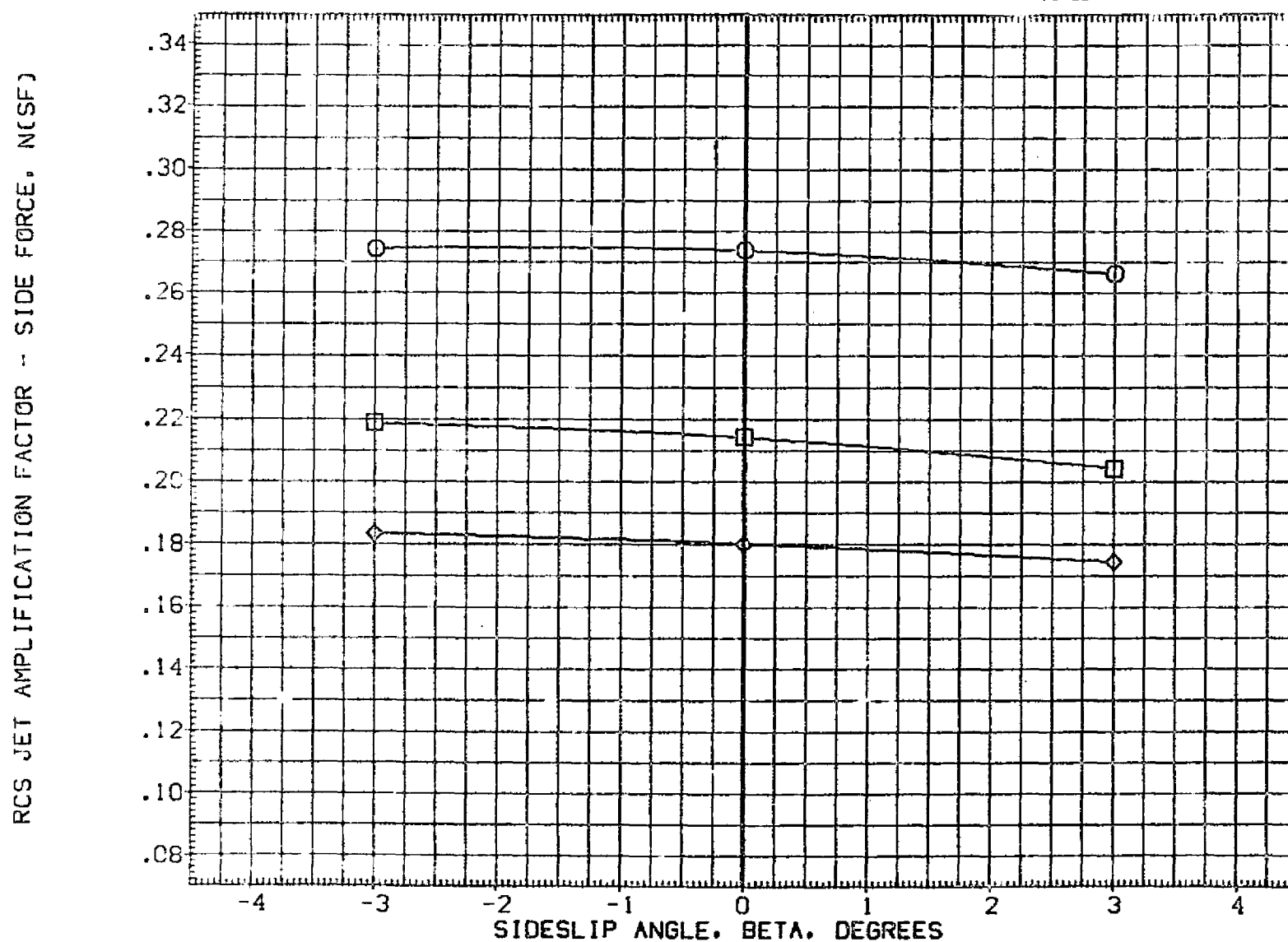


FIGURE 84. AMPLIFICATION FACTOR IN YAW, N83 JETS

01N78

LARC CFHT 118 (MA-22)

(CJA147)

SYMBOL	T/OA-1	PARAMETRIC VALUES
○	47.500	MACH 10.330 ALPHA -10.000
□	95.000	BDFLAP .000 T/OA 47.500
◇	190.000	NO.JET 1.000 ELEVON .000

REFERENCE INFORMATION		
SREF	2690.0000	90.FT.
LREF	474.8000	INCHES
BREF	936.6000	INCHES
XMRP	1076.7000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - PITCH, N(PM)

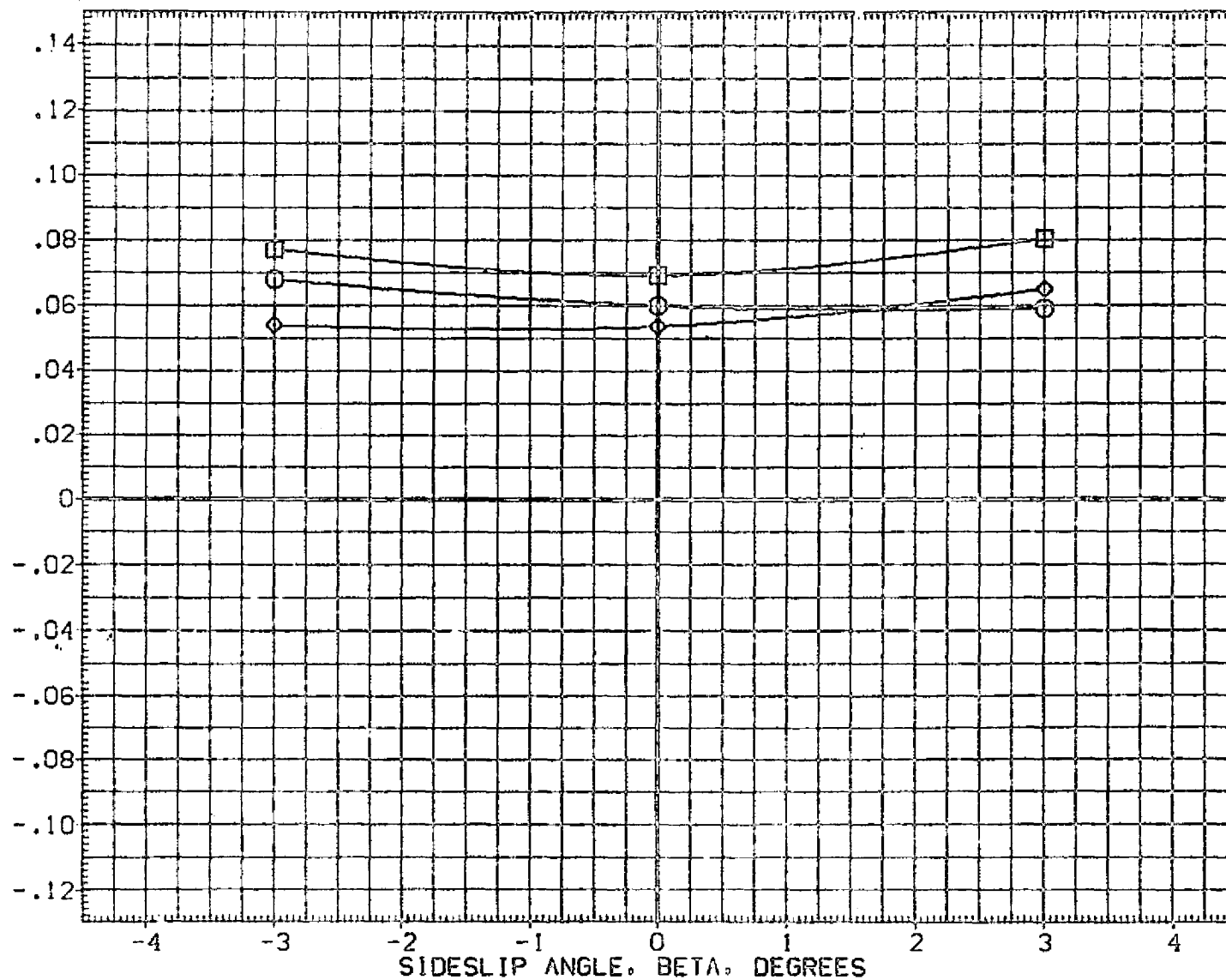


FIGURE 85. AMPLIFICATION FACTOR IN YAW, N78 JETS

SYMBOL	T/OA-1	MACH	PARAMETRIC VALUES	ALPHA	T/OA	ELEVON
○	47.500	10.330	.000	.000	47.500	.000
□	95.000	.000	.000	.000		
◇	190.000	NO JET	1.000	.000		

REFERENCE INFORMATION		
SREF	2690.0000	50. FT
LREF	471.3000	INCHES
BREF	935.6800	INCHES
XMRP	1076.7000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - PITCH, NCPM)

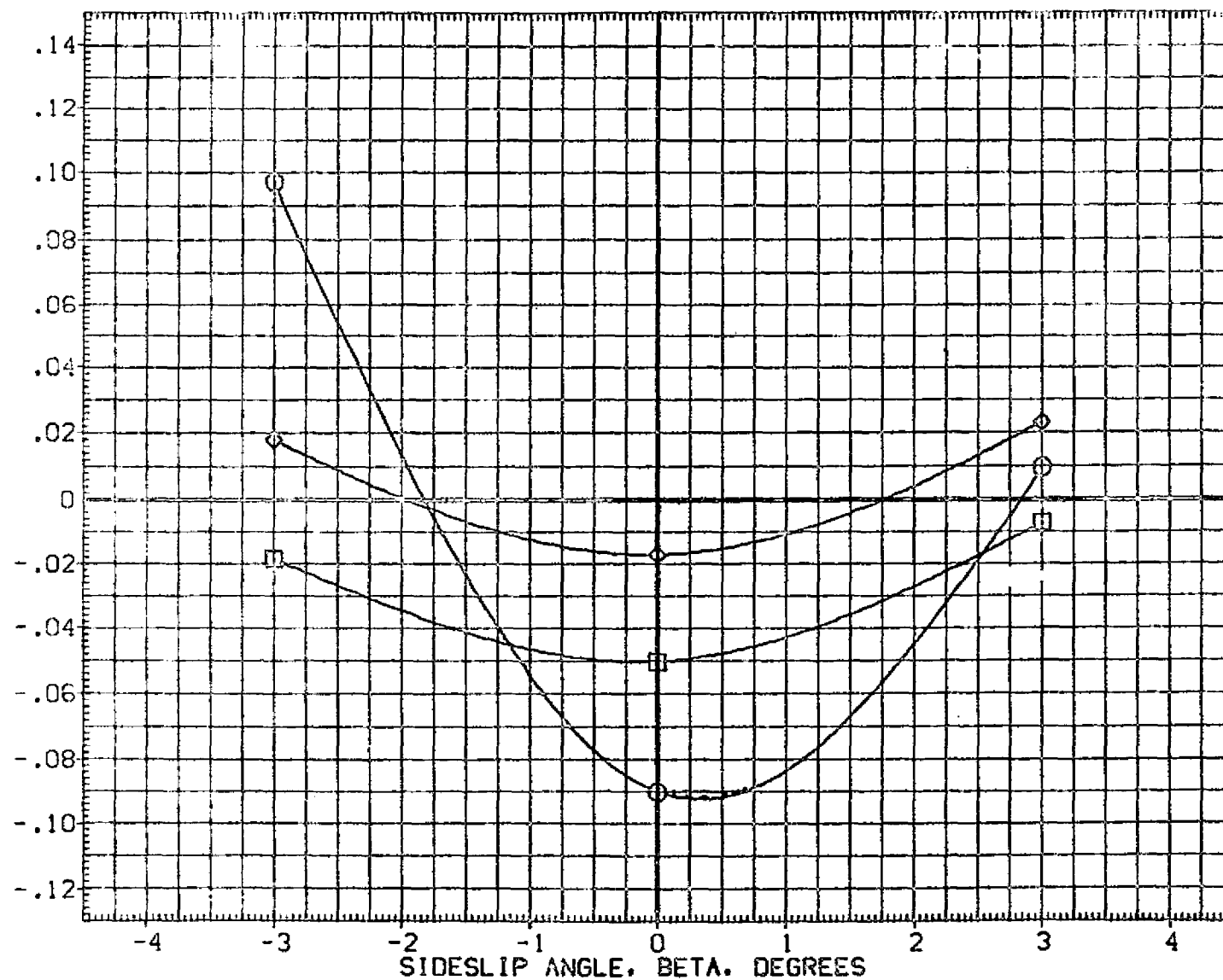


FIGURE 85. AMPLIFICATION FACTOR IN YAW, N78 JETS

01N78

LARC CEHT 118 (MA-22)

(CJA147)

SYMBOL	T/OA-1	PARAMETRIC VALUES
○	47.500	HACH 10.330 ALPHA 10.000
□	95.000	BDPLAP .000 T/OA 47.500
◇	190.000	NO.JET 1.000 ELEVGN .000

REFERENCE INFORMATION		
SREF	2690.0000	99. FT.
LREF	474.0000	INCHES
BREF	935.6000	INCHES
XGRP	1076.7000	IN. X0
YGRP	.0000	IN. Y0
ZGRP	375.0000	IN. Z0
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - PITCH, N(PM)

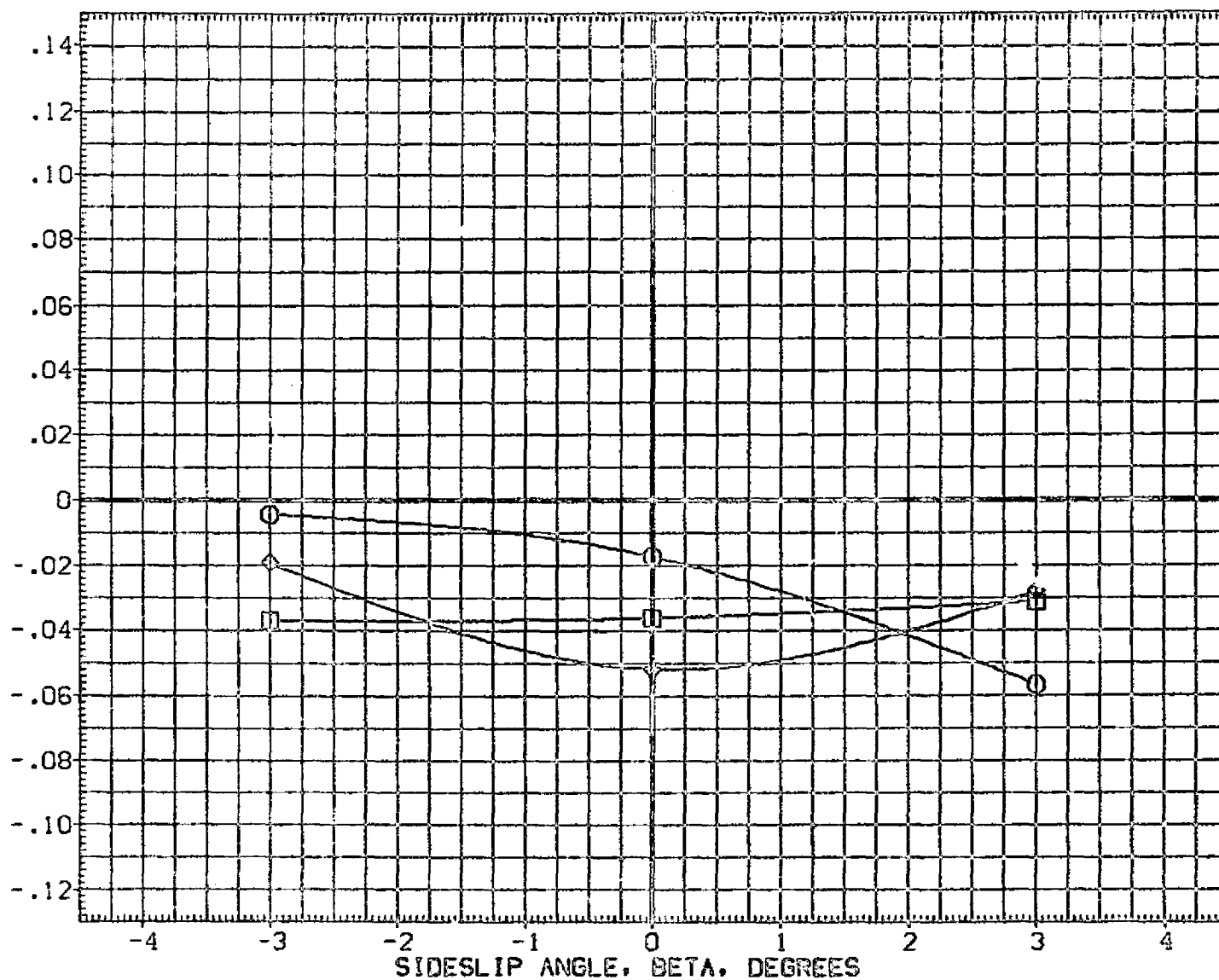


FIGURE 85. AMPLIFICATION FACTOR IN YAW, N78 JETS

SYMBOL	T/QA-1	PARAMETRIC VALUES
○	47.500	MACH 10.330 ALPHA 20.000
□	95.000	90FLAP .000 T/QA 47.500
◇	190.000	NOJET 1.000 ELEVON .000

REFERENCE INFORMATION		
SREF	2650.0000	50. FT.
LREF	474.6000	INCHES
BREF	935.6000	INCHES
YMRP	1076.7000	IN. 20
YMRP	.0000	IN. 10
ZMRP	375.0000	IN. 20
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - PITCH, N(PM)

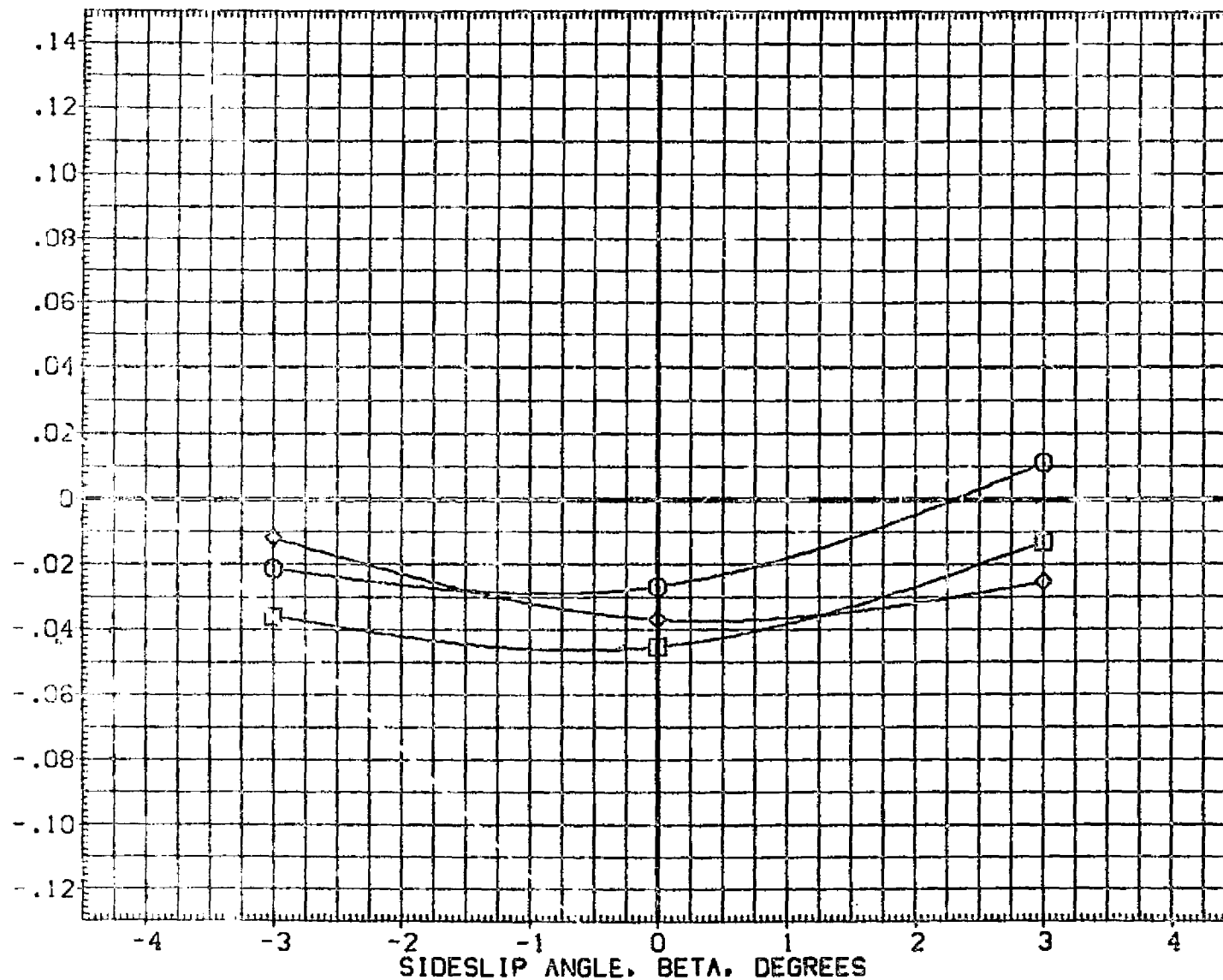


FIGURE 85. AMPLIFICATION FACTOR IN YAW, N78 JETS

01N78

LARC CFHT 118 (MA-22)

(CJA147)

SYMBOL	T/OA-1	PARAMETRIC VALUES
○	47.500	MACH 10.330 ALPHA 35.000
□	95.000	BDFLAP .000 T/OA 47.500
◇	190.000	NO.JET 1.000 ELEVON .000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8000	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - PITCH, N(PM)

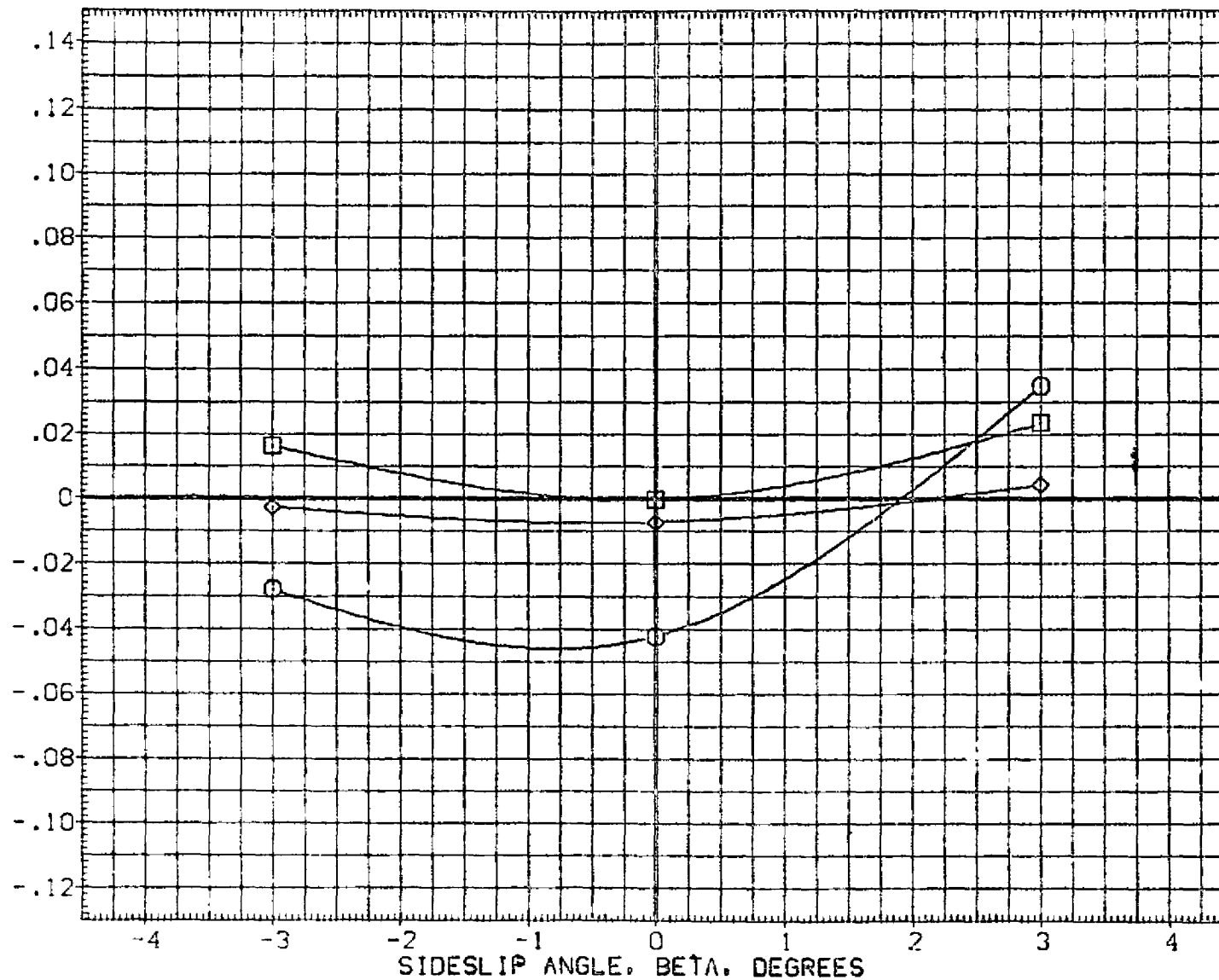


FIGURE 85. AMPLIFICATION FACTOR IN YAW, N78 JETS

SYMBOL	T/QA-1	PARAMETRIC VALUES
○	47.500	MACH 10.330 ALPHA -10.000
□	95.000	BDFLAP .000 T/QA 47.500
◇	190.000	NO JET 1.000 ELEVON .000

REFERENCE INFORMATION		
SREF	2680.0000	50. FT.
LREF	474.8000	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - ROLL, NCRM

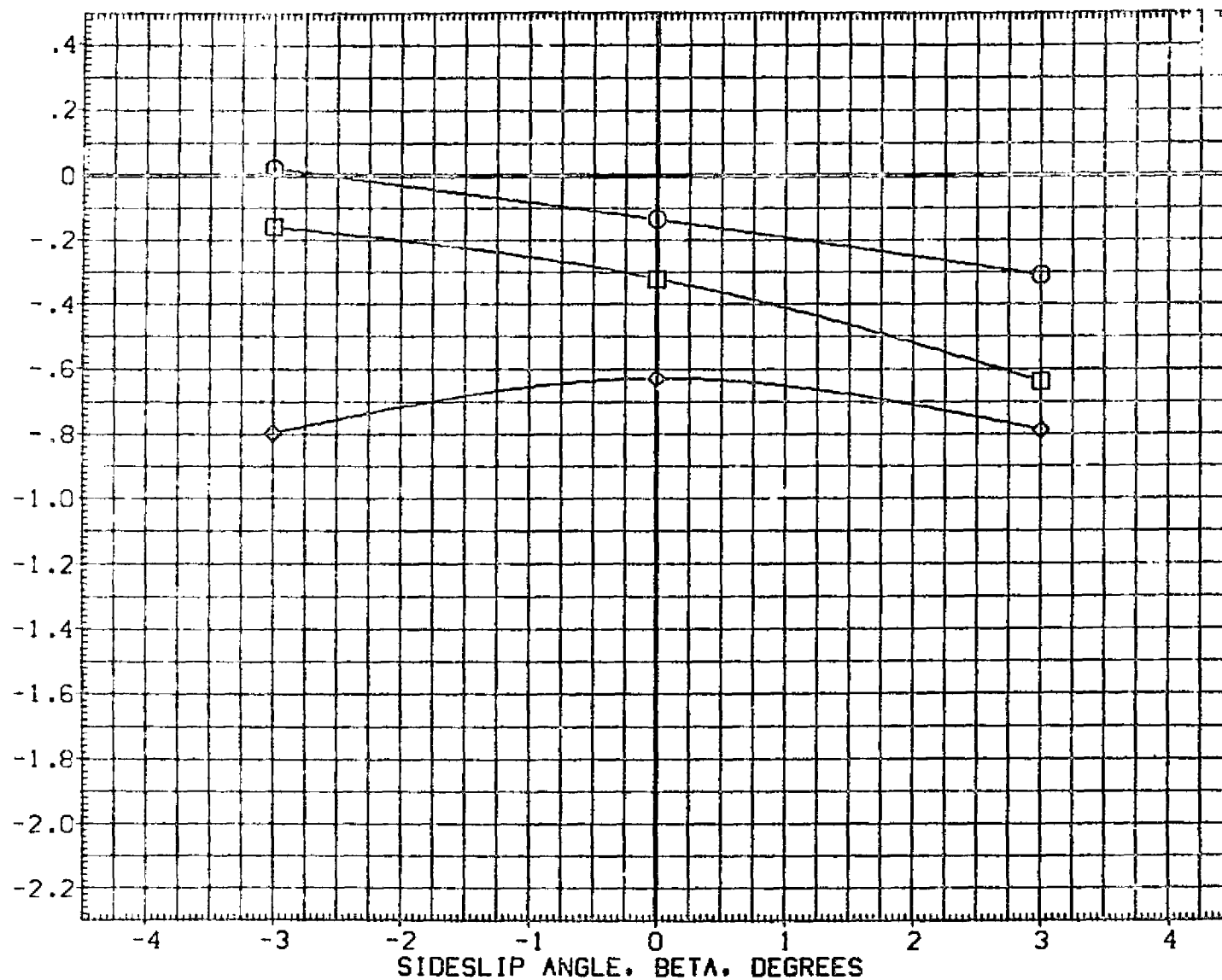


FIGURE 85. AMPLIFICATION FACTOR IN YAW, N78 JETS

01N78

LARC CFHT 118 (MA-22)

(CJA147)

SYMBOL	T/QA-1	PARAMETRIC VALUES
○	47.500	MACH 10.330 ALPHA .000
□	95.000	BDFLAP .000 T/QA 47.500
◇	190.000	NOJET 1.000 ELEVON .000

REFERENCE INFORMATION		
SREF	2690.0000	90. FT.
LREF	474.0000	INCHES
BREF	935.0000	INCHES
XMRP	1076.7000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - ROLL, NCRM)

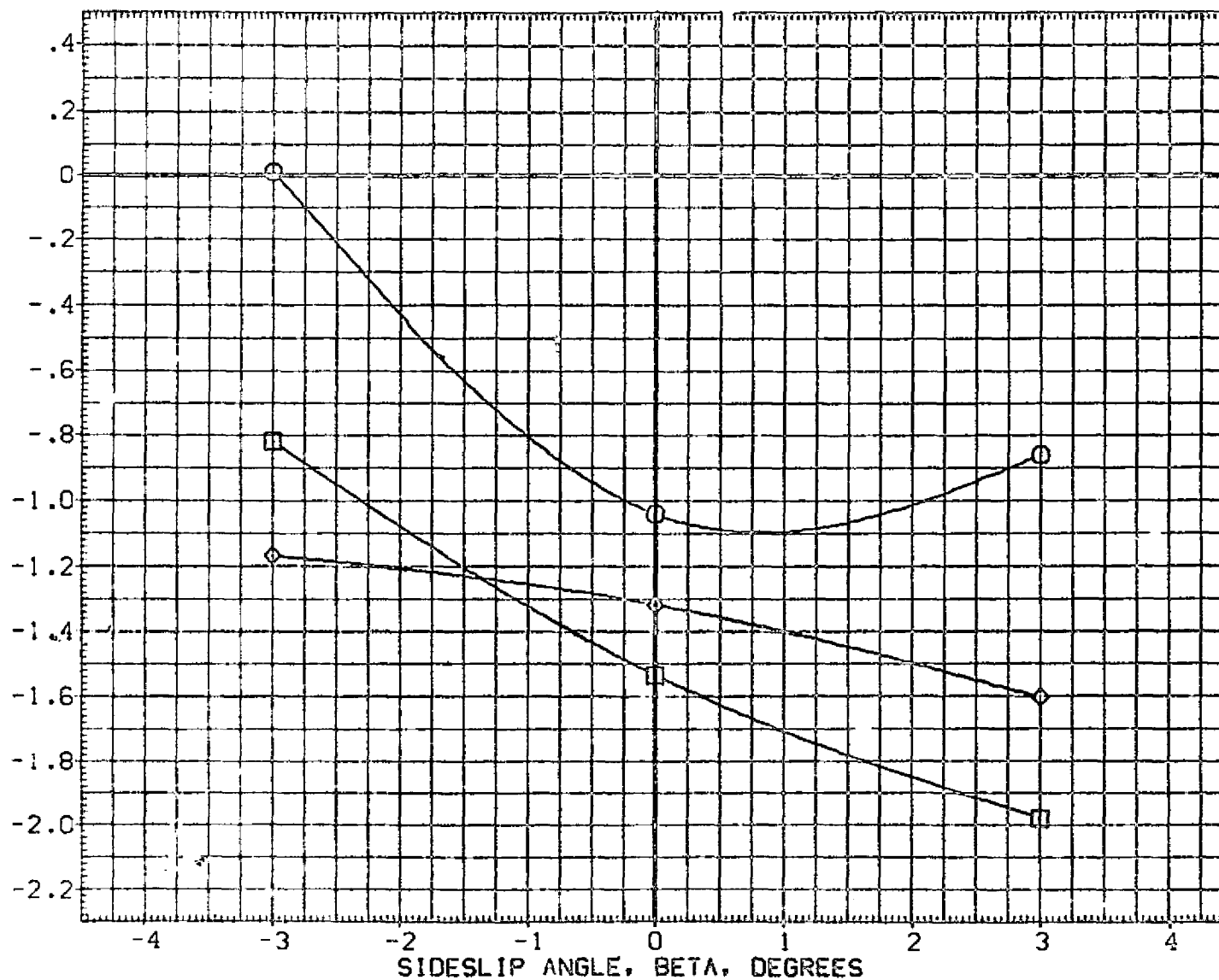


FIGURE 85. AMPLIFICATION FACTOR IN YAW, N78 JETS

SYMBOL	T/QA-1	PARAMETRIC VALUES
○	47.500	MACH 10.330 ALPHA 10.000
□	95.000	BDFLAP .000 T/QA 47.500
◇	190.000	NO.JET .000 ELEVON .000

REFERENCE INFORMATION	
SREF	2690.0000 SQ.FT.
LREF	474.8000 INCHES
BREF	936.6800 INCHES
XMRP	1076.7000 IN. Y0
YMRP	.0000 IN. Y0
ZMRP	375.0000 IN. Z0
SCALE	.0100

RCS JET AMPLIFICATION FACTOR - ROLL, N(RM)

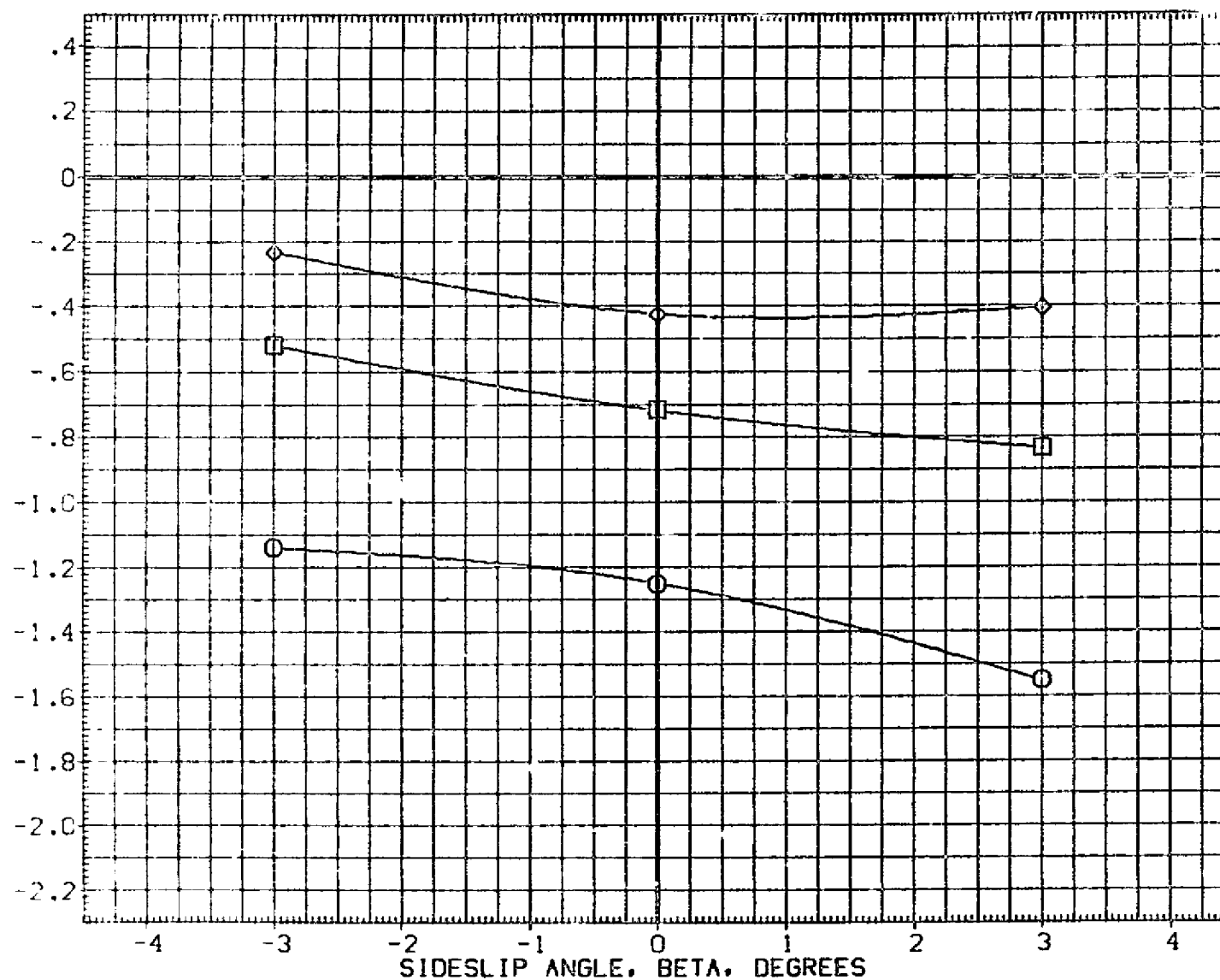


FIGURE 95. AMPLIFICATION FACTOR IN YAW, N78 JETS

01N78

LARC CRHT 118 (MA-22)

(CJA147)

SYMBOL	T/OA-1	PARAMETRIC VALUES
○	47.500	MACH 10.330 ALPHA 20.000
□	95.000	BDFLAP .000 T/OA 47.500
◇	190.000	NOJET 1.000 ELEVON .000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.6000	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - ROLL, N(RM)

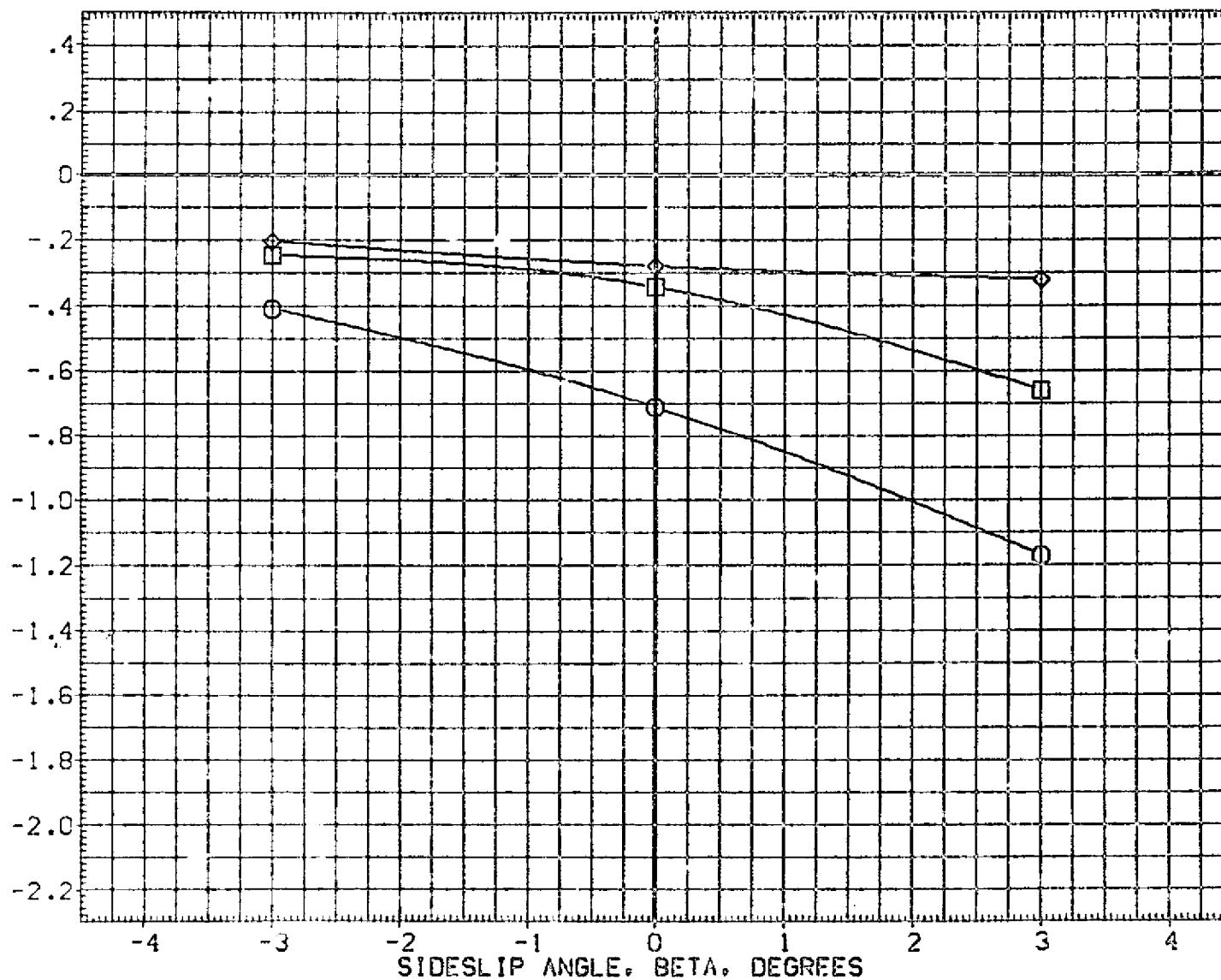


FIGURE 85. AMPLIFICATION FACTOR IN YAW, N78 JETS

SYMBOL	T/OA-1	PARAMETRIC VALUES			
○	47.500	MACH	10.330	ALPHA	35.000
□	95.000	BDFLAP	.000	T/OA	47.500
◇	190.000	NO. JET	1.000	ELEVON	.000

REFERENCE INFORMATION		
SREF	2690.0000	IN. FT.
LREF	474.8000	INCHES
BREF	936.6800	INCHES
XREF	10.6.7000	IN. X3
YREF	.0000	IN. Y0
ZREF	375.0000	IN. Z0
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - ROLL, NCRM

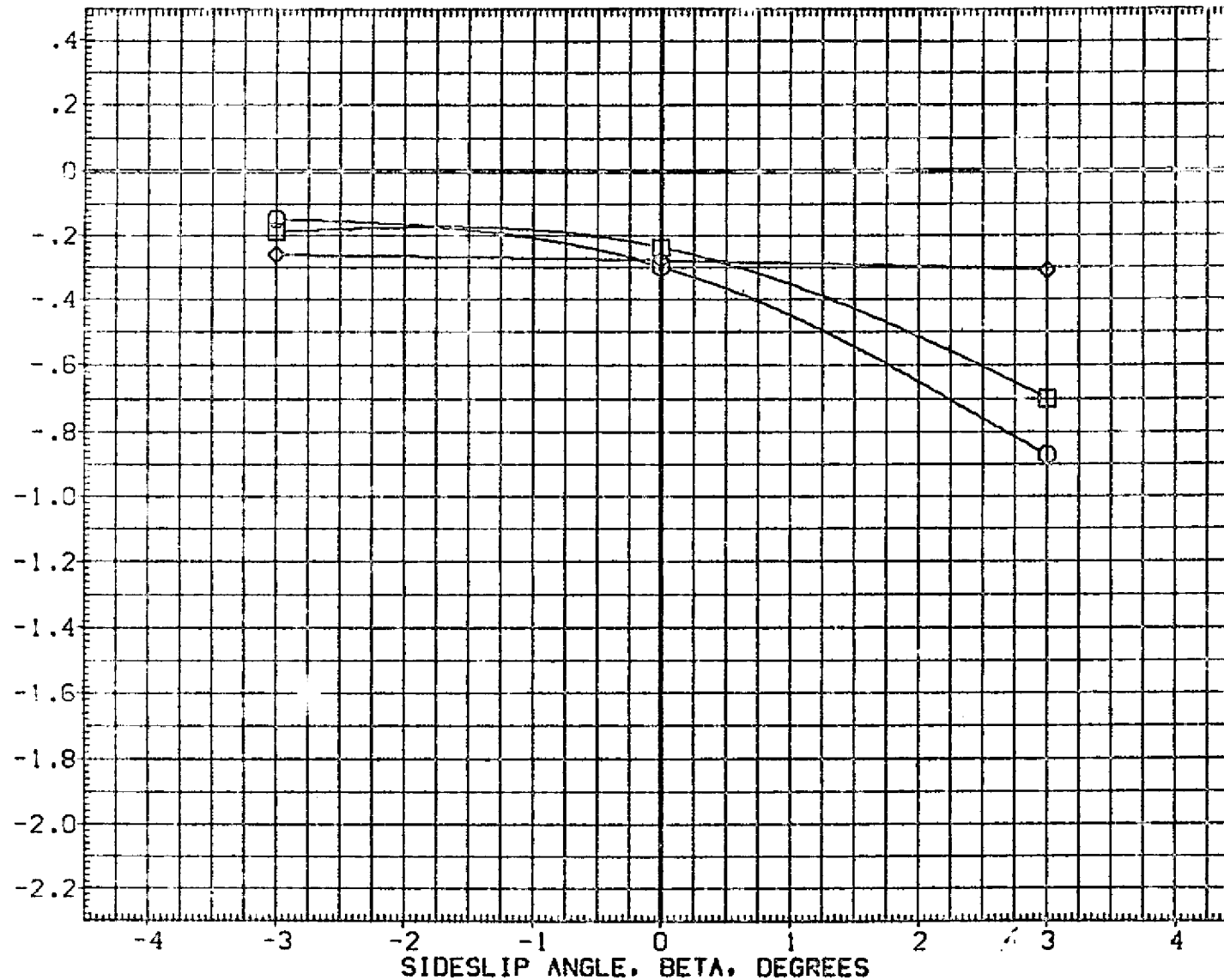


FIGURE 85. AMPLIFICATION FACTOR IN YAW, N78 JETS

01N78

LARC CFHT 118 (MA-22)

(CJA147)

SYMBOL	T/OA-1	PARAMETRIC VALUES			
○	47.500	MACH	10.330	ALPHA	-10.000
□	55.000	BDFLAP	.050	T/OA	47.500
◇	190.000	NO.JET	1.000	ELEVON	.000

REFERENCE INFORMATION		
SREF	2890.0000	50.FT.
LREF	474.0000	INCHES
BREF	923.6000	INCHES
MMRP	1076.7000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - YAW, N(YM)

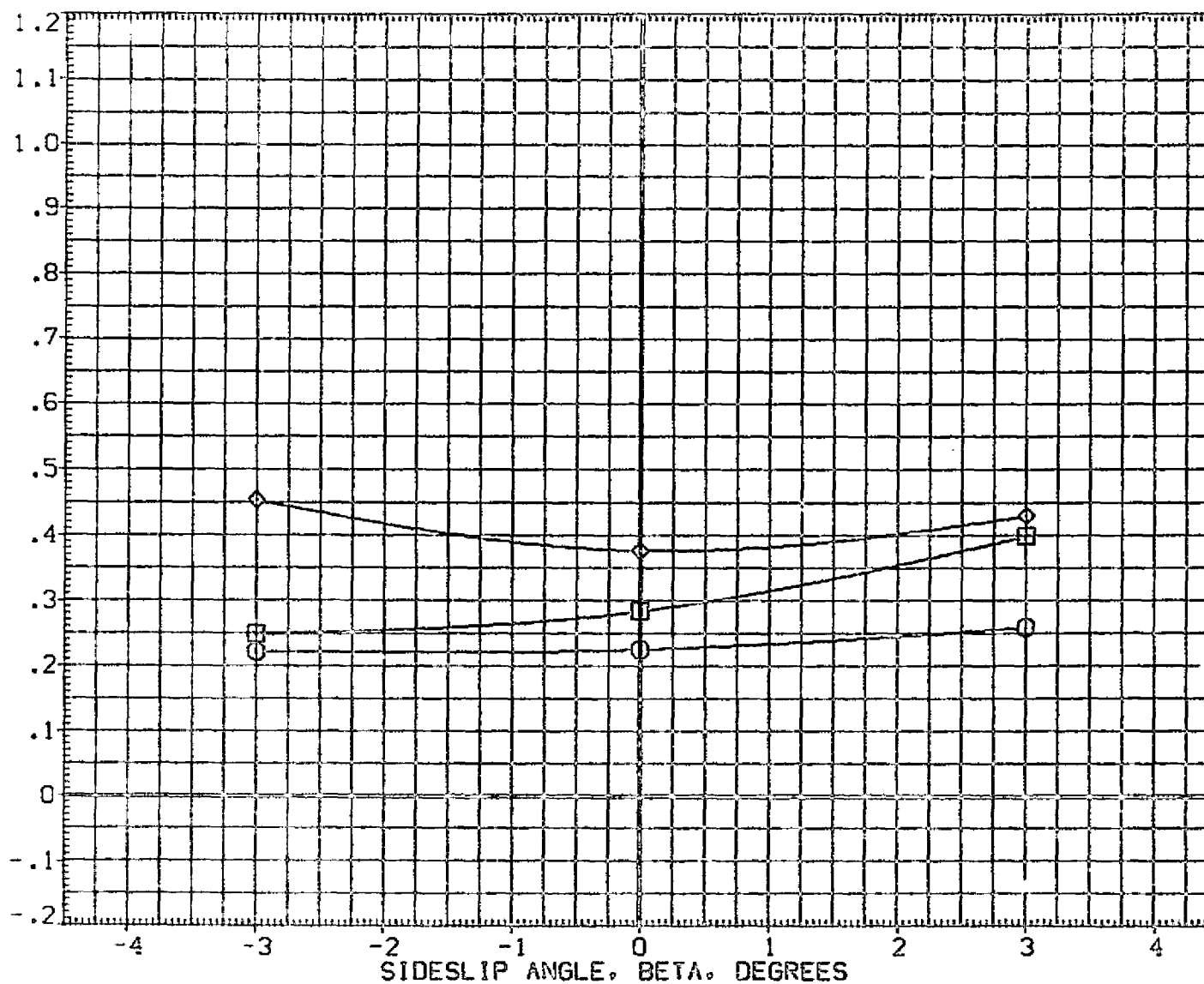


FIGURE 85. AMPLIFICATION FACTOR IN YAW, N78 JETS

SYMBOL

○
□
◇

T/QA-1

47.500
95.000
190.000

MACH

BDPLAP

NOJET

PARAMETRIC VALUES

10.330
.000
1.000

ALPHA

T/QA

ELEVON

.000
47.500
.000

REFERENCE INFORMATION

SREF 2690.0000
LREF 474.8000
BREF 936.6800
XMRP 1076.7000
YMRP .0000
ZMRP 375.0000
SCALE .01009. FT.
INCHES
INCHES
IN. X0
IN. Y0
IN. Z0

RCS JET AMPLIFICATION FACTOR - YAW. N(YM)

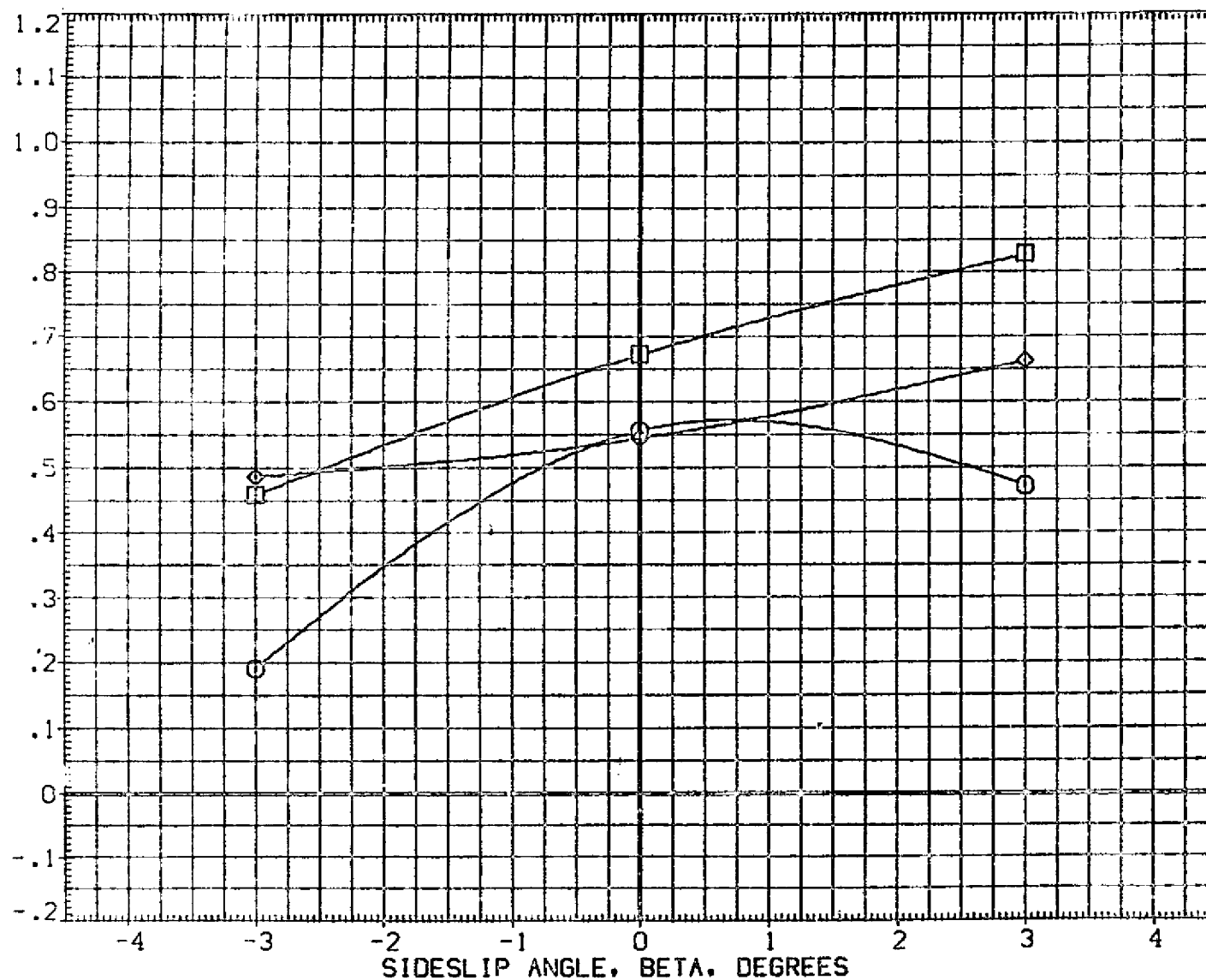


FIGURE 85. AMPLIFICATION FACTOR IN YAW, N78 JETS

01N78

LARC CEHT 118 (MA-22)

(CJA147)

SYMBOL	T/QA-1	PARAMETRIC VALUES
○	47.500	MACH 10.330 ALPHA 10.000
□	95.000	BDPLAP .000 T/QA 47.500
◇	190.000	NOJET 1.000 ELEVON .000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.0000	INCHES
BREF	936.6000	INCHES
XMRP	1076.7000	IN. XG
YMRP	.0000	IN. YG
ZMRP	375.0000	IN. ZG
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - YAW, N(YM)

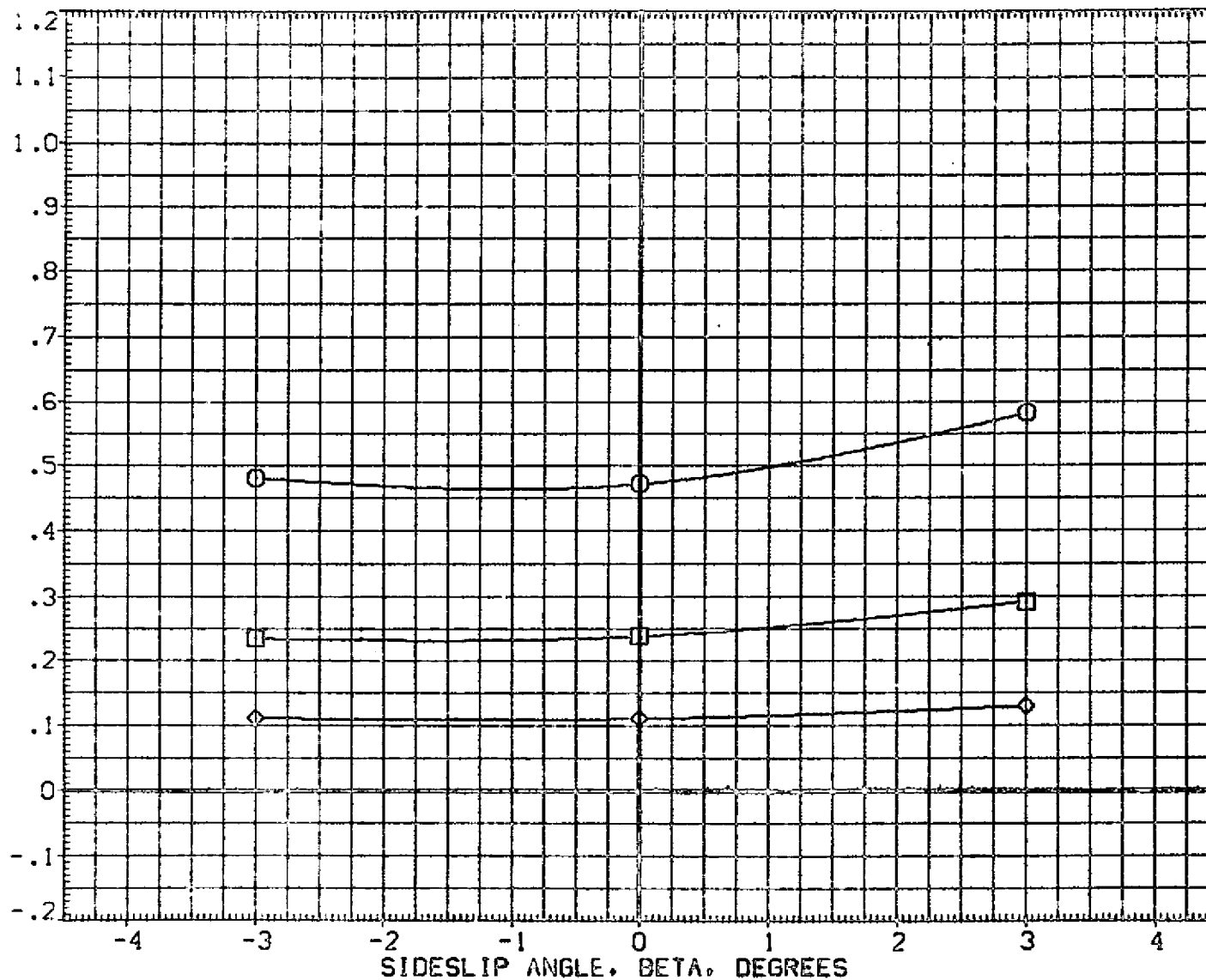


FIGURE 85. AMPLIFICATION FACTOR IN YAW, N78 JETS

SYMBOL



T/QA-1

47.500

MACH

BDFLAP

190.000

NO.JET

PARAMETRIC VALUES

10.330

ALPHA

T/QA

1.000

ELEVON

20.000

47.500

.000

REFERENCE INFORMATION

SREF

2690.0000

IN. FT.

LREF

474.8000

IN. IN.

BREF

936.6800

IN. IN.

XMRP

1076.7000

IN. X0

YMRP

.0000

IN. Y0

ZMRP

375.0000

IN. Z0

SCALE

.0100

RCS JET AMPLIFICATION FACTOR - YAW, N(YM)

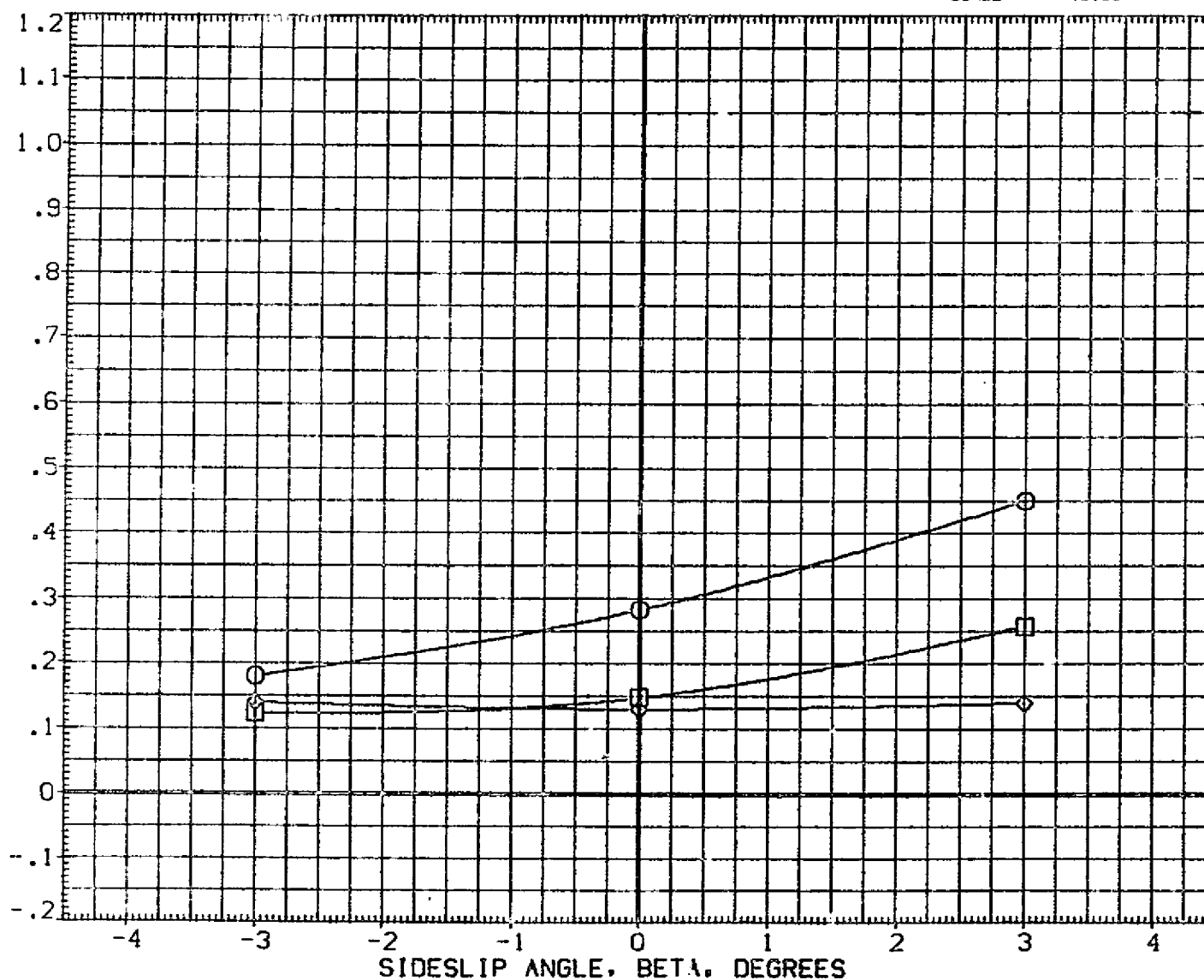


FIGURE 85. AMPLIFICATION FACTOR IN YAW, N78 JETS

01N78

LARC CFHT 118 (MA-22)

(CJA147)

SYMBOL	T/QA-1	PARAMETRIC VALUES
○	47.500	MACH 10.330 ALPHA 35.000
□	95.000	BDFLAP .000 T/QA 47.500
◇	190.000	NOJET 1.000 ELEVON .000

REFERENCE INFORMATION		
SREF	2690.0000	50.FT.
LREF	474.0000	INCHES
BREF	936.6600	INCHES
XMRP	1076.7000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - YAW, N(YM)

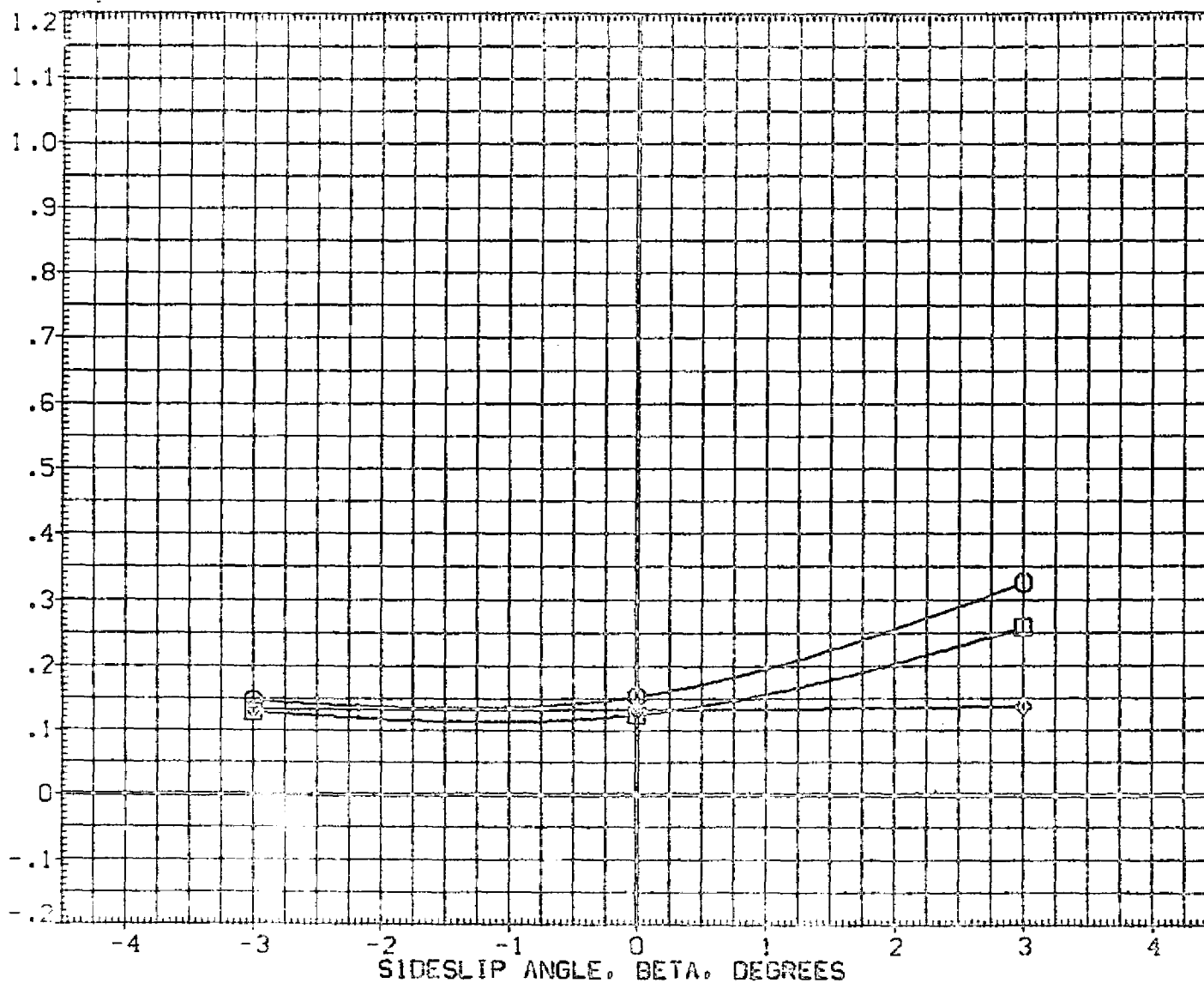


FIGURE 85. AMPLIFICATION FACTOR IN YAW, N78 JETS

SYMBOL	T/QA-1	PARAMETRIC VALUES			
○	47.500	MACH	10.330	ALPHA	-10.000
□	95.000	90FLAP	.000	T/QA	47.500
◇	190.000	NO.JET	1.000	ELEVON	.000

REFERENCE INFORMATION		
SREF	2690.0000	50.FT.
LREF	474.8000	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	INCHES
YMRP	.0000	INCHES
ZMRP	375.0000	INCHES
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - NORMAL FORCE, N(NF)

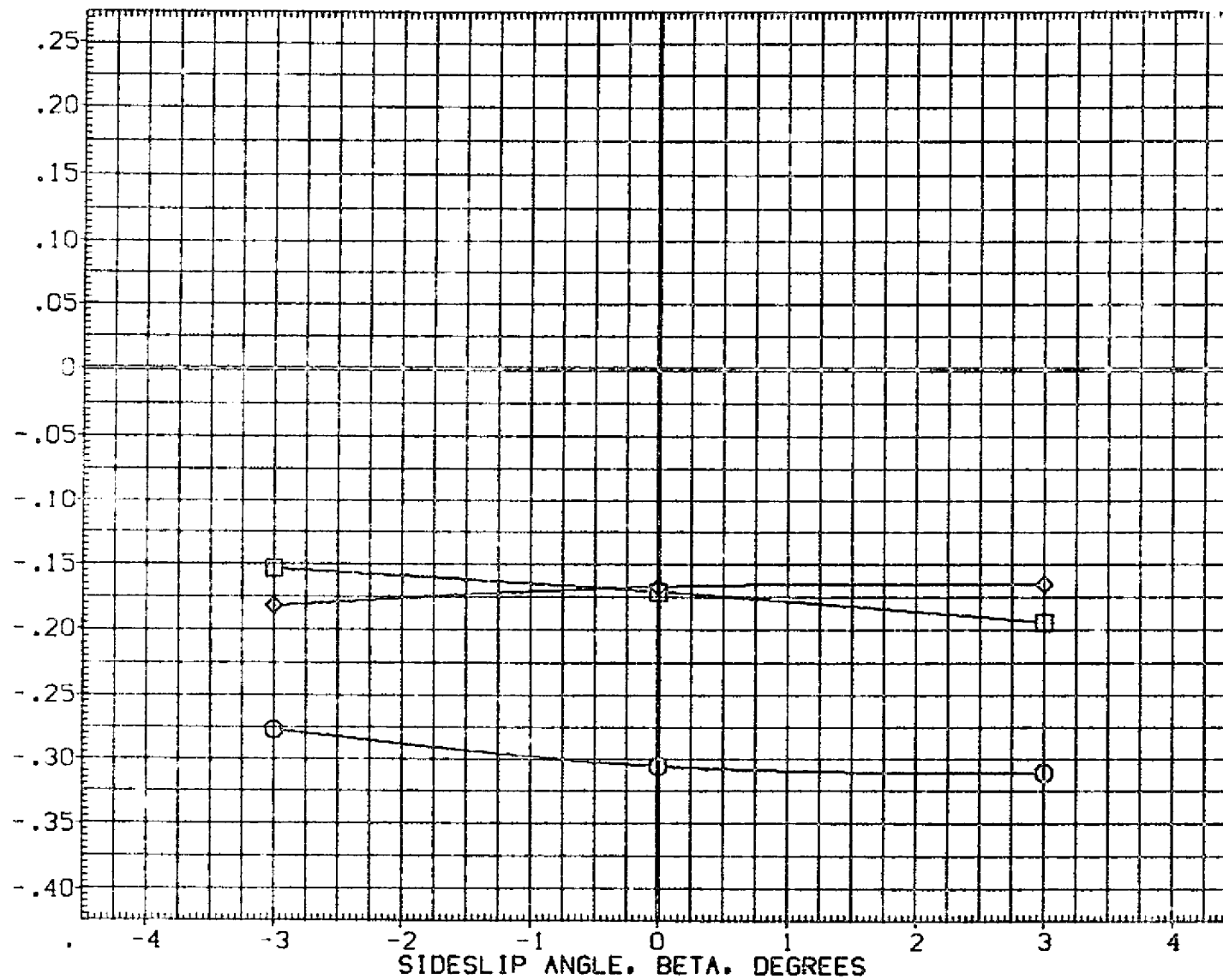


FIGURE 85. AMPLIFICATION FACTOR IN YAW, N78 JETS

CIN78

LARC CFHT 118 (MA-22)

(CJA147)

SYMBOL	T/O-1	PARAMETRIC VALUES			
○	47.500	MACH	10.330	ALPHA	.000
□	95.000	BDFLAP	.000	T/OA	47.500
◇	190.000	NOJET	1.000	ELEVON	.000

REFERENCE INFORMATION		
SREF	2690.0000	SO.FT.
LREF	474.0000	INCHES
BREF	935.6800	INCHES
XMRP	1076.7000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - NORMAL FORCE, N(NF)

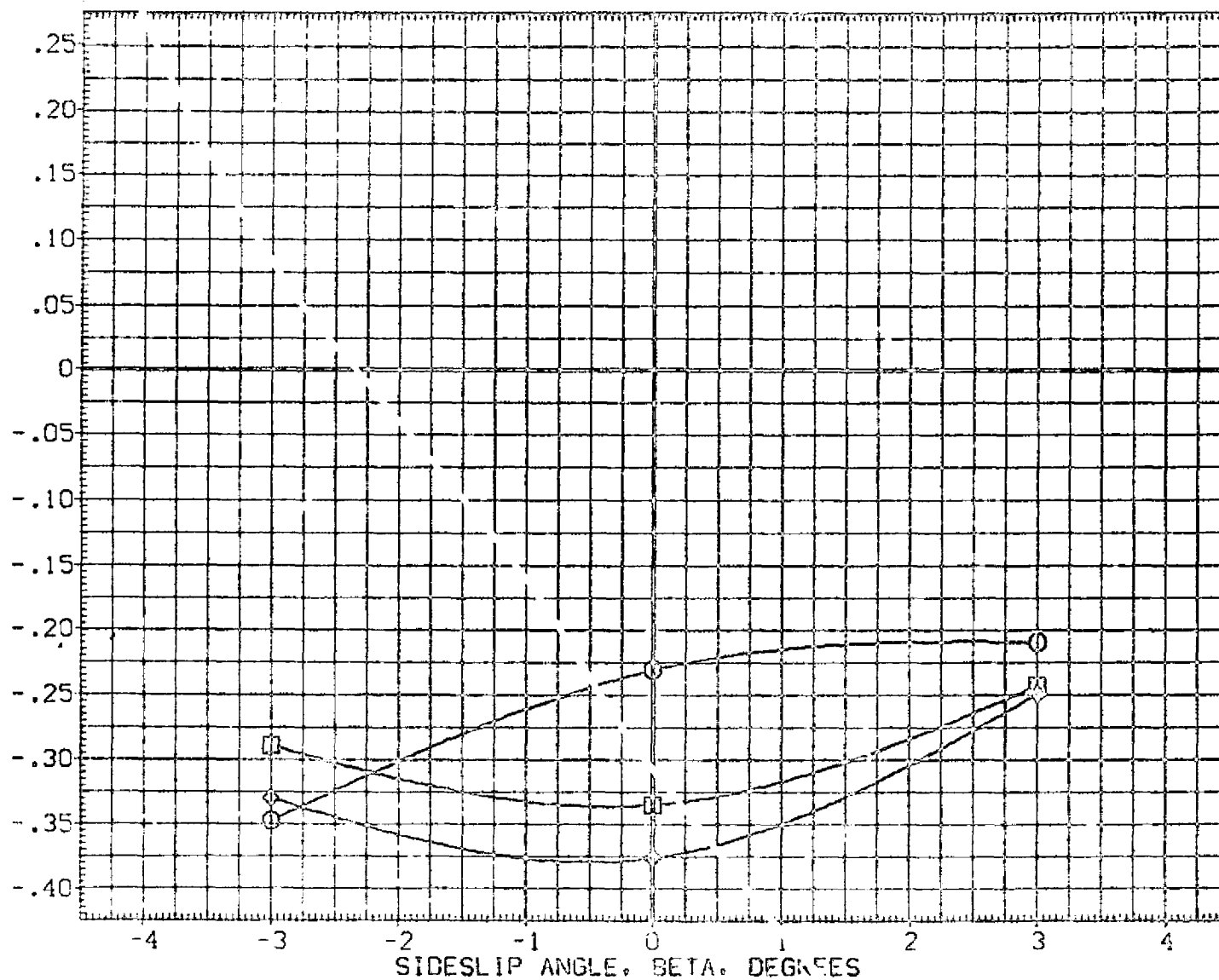


FIGURE 85. AMPLIFICATION FACTOR IN YAW, N78 JETS

SYMBOL	T/OA-1	PARAMETRIC VALUES
○	47.500	MACH 10.330 ALPHA 10.000
□	35.000	90FLAP .000 T/OA 47.500
◇	190.000	NOJET 1.000 ELEVON .000

REFERENCE INFORMATION		
SREF	2690.0000	SO. FT.
LREF	474.0000	IN. FT.
SRF	936.6600	IN. FT.
XRFP	1076.7000	IN. FT.
YREF	.0000	IN. FT.
ZREF	375.0000	IN. FT.
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - NORMAL FORCE, N(NF)

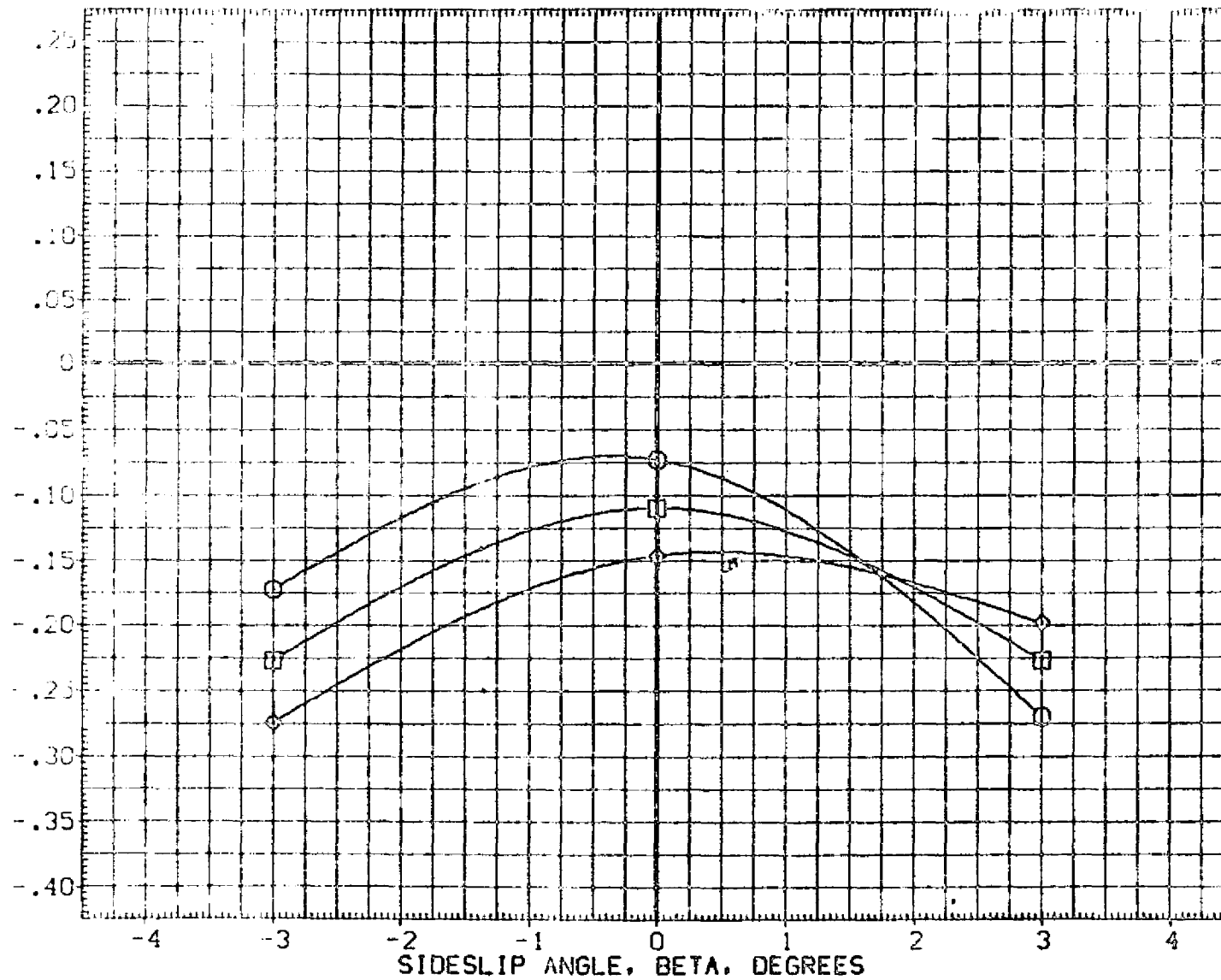


FIGURE 85. AMPLIFICATION FACTOR IN YAW, N78 JETS

01N78

LARC CFT 118 (MA-22)

(CJA147)

SYMBOL	T/OA-1	PARAMETRIC VALUES			
○	47.500	MACH	10.330	ALPHA	20.000
□	95.000	BDPLAP	.000	T/OA	47.500
◇	190.000	NOJET	1.000	ELEVON	.000

REFERENCE INFORMATION		
SREF	2690.0000	60. FT.
LREF	474.0000	INCHES
BREF	935.6800	INCHES
MMRP	1076.7000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - NORMAL FORCE, N(NF)

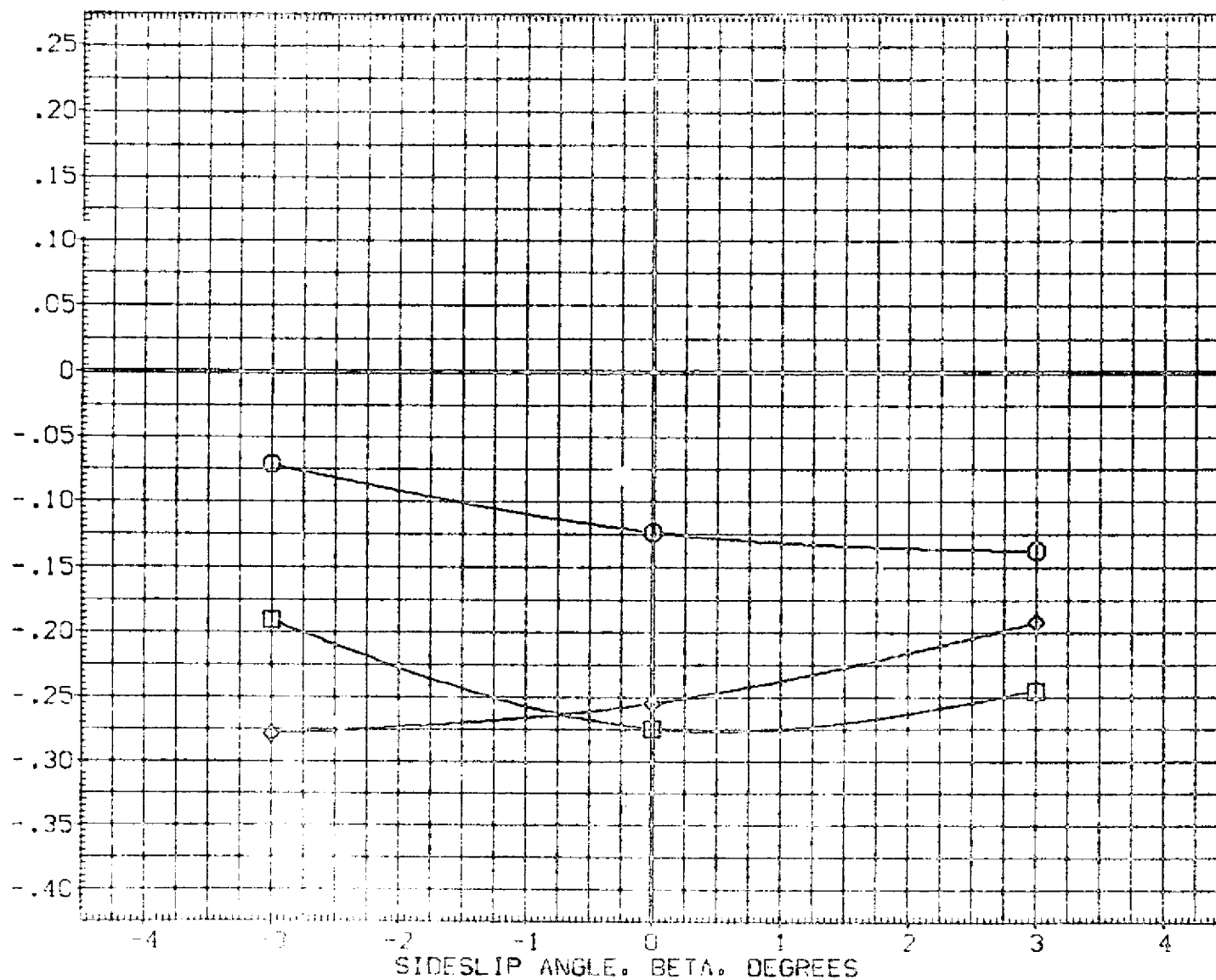


FIGURE 85. AMPLIFICATION FACTOR IN YAW, N78 JETS

○ BCL
□
◇

T/OA-1
47.500
95.000
190.000

MACH
BDFLAP
NOJET

PARAMETRIC VALUES

10.330 ALPHA 35.000
.000 T/OA 47.500
1.000 ELEVON .000

REFERENCE INFORMATION

SREF 2600.0000
LREF 400.0000
BREF 900.6800
XMRP 1076.7000
YMRP .0000
ZMRP 375.0000
SCALE .0100

RCS JET AMPLIFICATION FACTOR - NORMAL FORCE, N(NF)

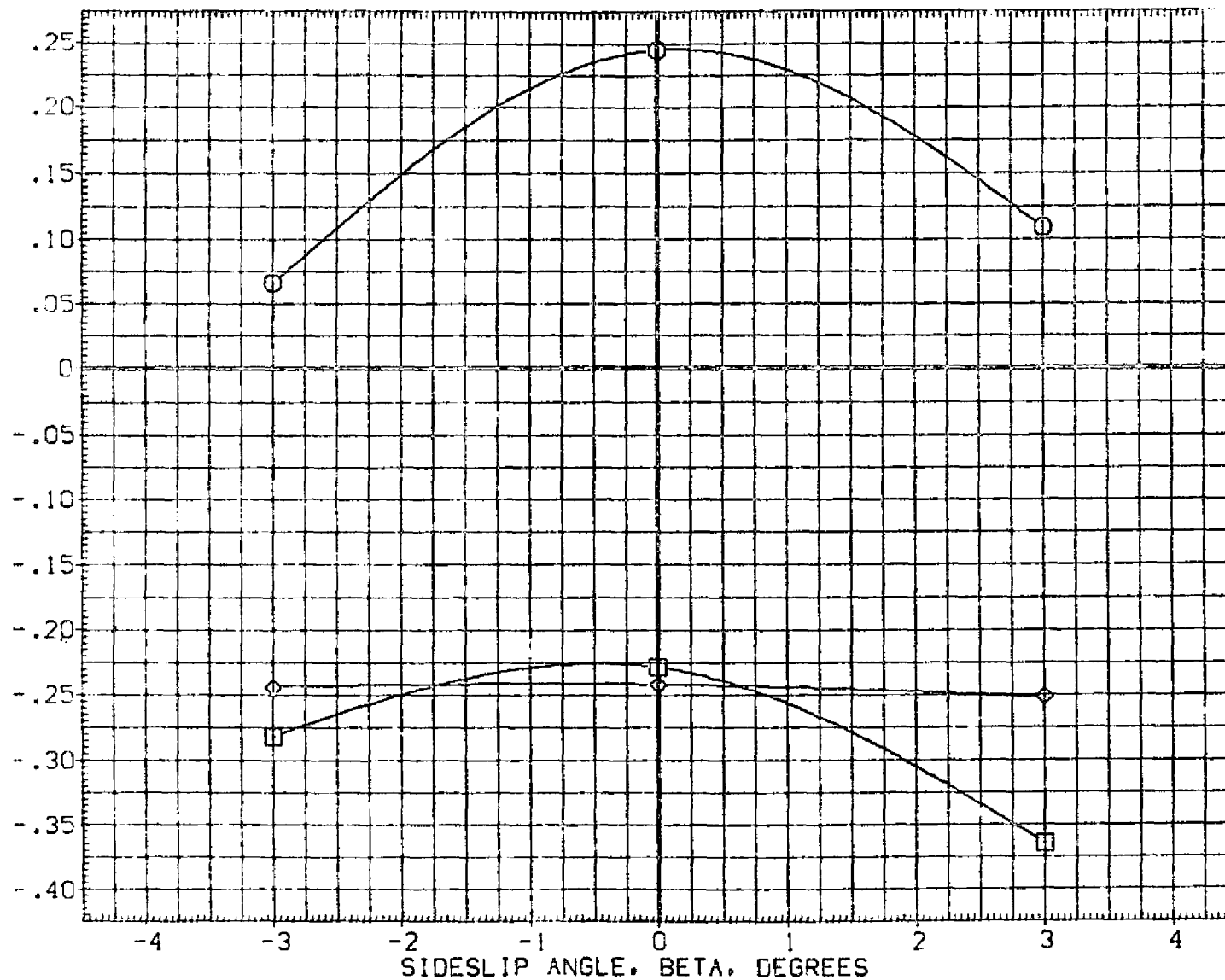


FIGURE 85. AMPLIFICATION FACTOR IN YAW, N78 JETS

01N79

LARC CFHT 119 (MA-22)

(CJA147)

SYMBOL

T/GA-1

PARAMETRIC VALUES

○
□
◇47.500
95.000
190.000MACH
BDFLAP
NOJET10.330
.000
1.000ALPHA
T/QA
ELEVON-10.000
47.500
.000

REFERENCE INFORMATION

SREF	2690.0000	SO.FT.
LREF	474.8000	INCHES
BREF	936.6800	INCHES
XHRP	1076.7000	IN. X0
YHRP	.0000	IN. Y0
ZHRP	375.0000	IN. Z0
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - AXIAL FORCE, N(AF)

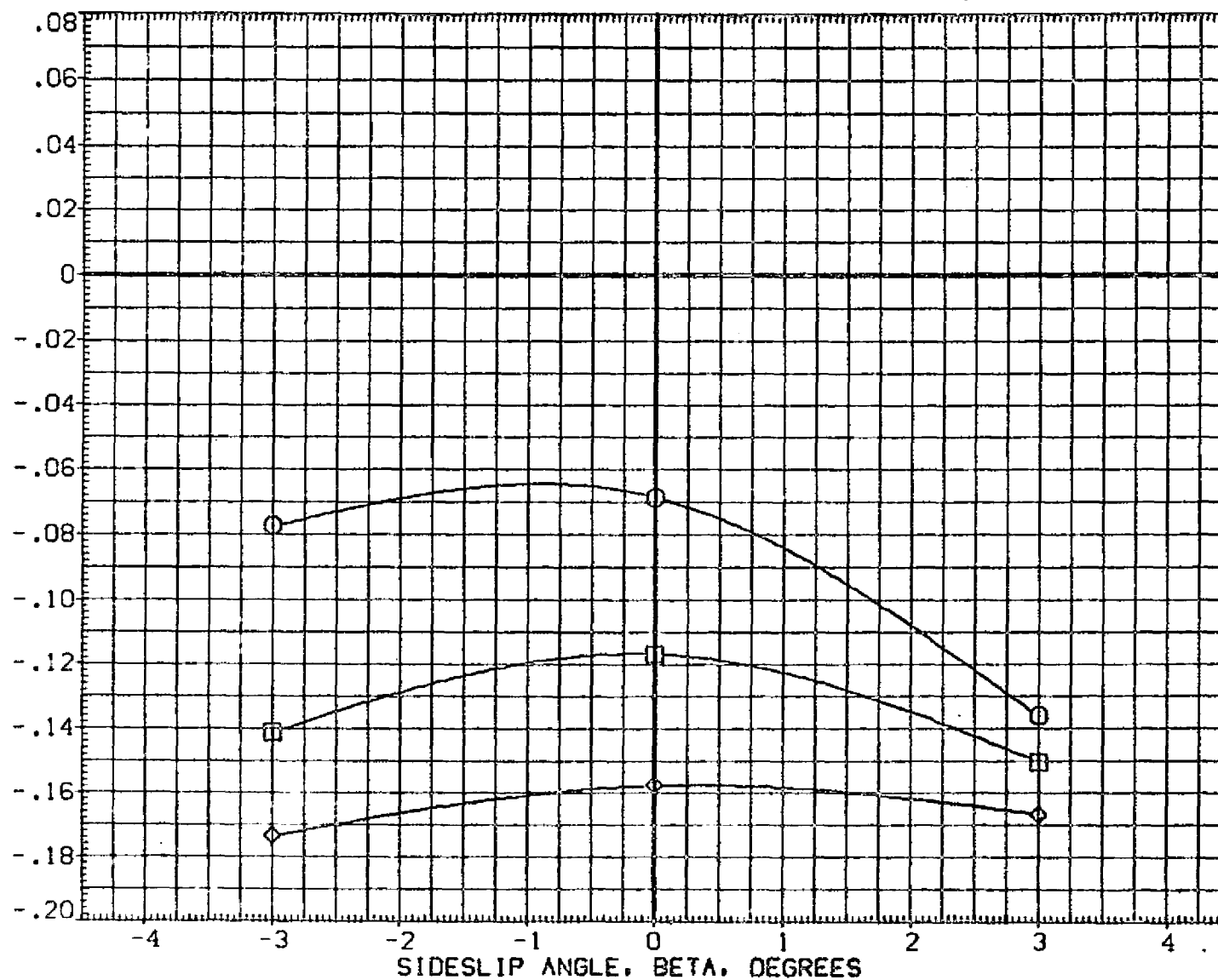


FIGURE 85. AMPLIFICATION FACTOR IN YAW, N78 JETS

SYMBOL

T/GA-1

PARAMETRIC VALUES

O
 □
 ◇

47.500

MACH

10.330

ALPHA

.000

95.000

DOFLAP

.000

T/GA

47.500

199.000

NO. JET

1.000

ELEVON

.000

REFERENCE INFORMATION

SREF 2690.0000

SO. T.

LREF 470.0000

SO. S

GREF 936.5900

SO. S

XMRP 1070.0000

IN. X0

YMRP .0000

IN. Y0

ZMRP 375.0000

IN. Z0

SCALE .0100

RCS JET AMPLIFICATION FACTOR - AXIAL FORCE, N(AF)

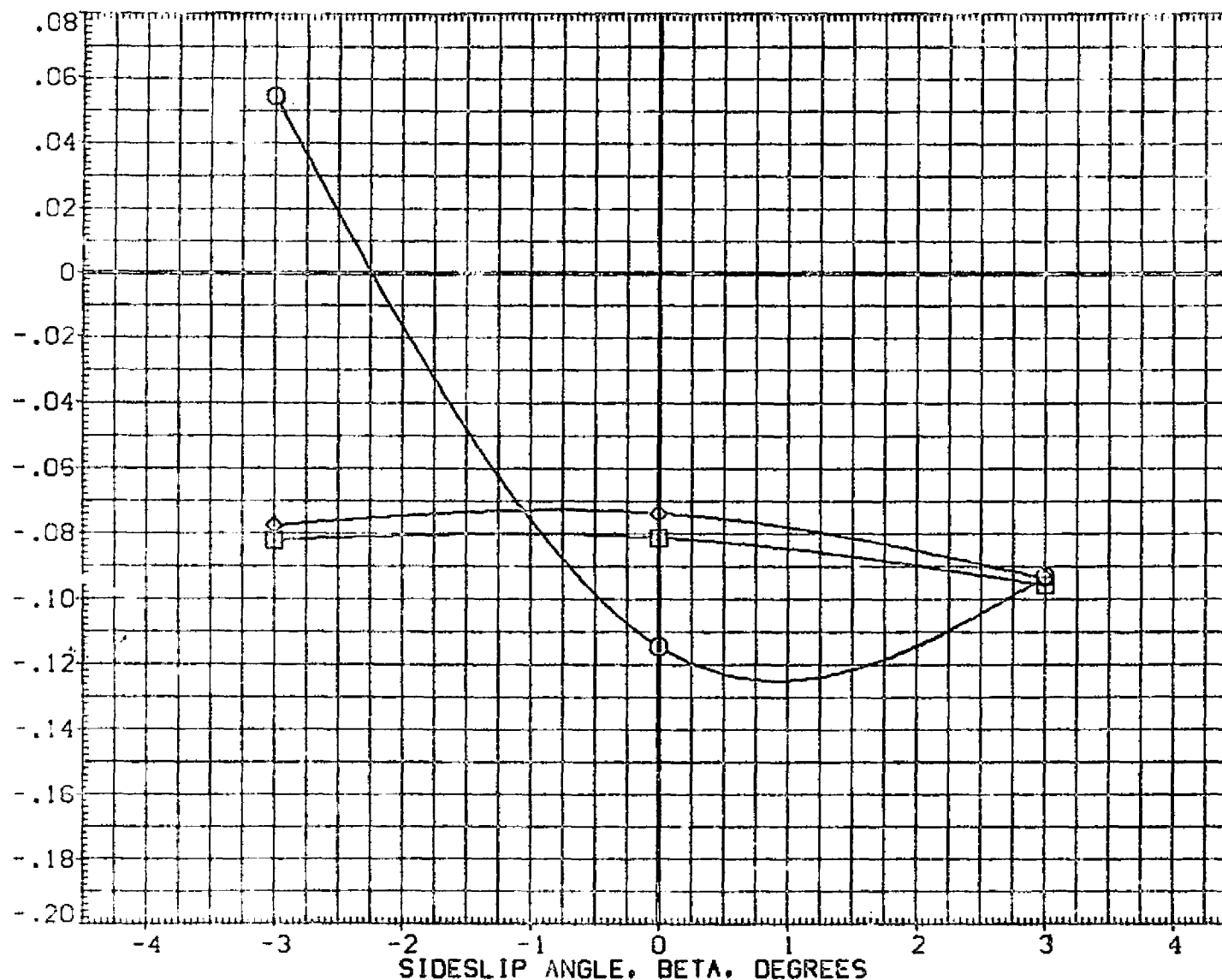


FIGURE 85. AMPLIFICATION FACTOR IN YAW, N78 JETS

01N78

LARC CFHT 118 (MA-22)

(CJA147)

SYMBOL

T/QA-1

PARAMETRIC VALUES

○
 □
 ◇

47.500
 95.000
 190.000

MACH
 BDFLAP
 NO.JET

10.330
 .000
 1.000

ALPHA
 T/QA
 ELFVN

10.000
 47.500
 .000

REFERENCE INFORMATION

SREF	2690.0000	50.FT.
LREF	474.6000	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - AXIAL FORCE, N(AF)

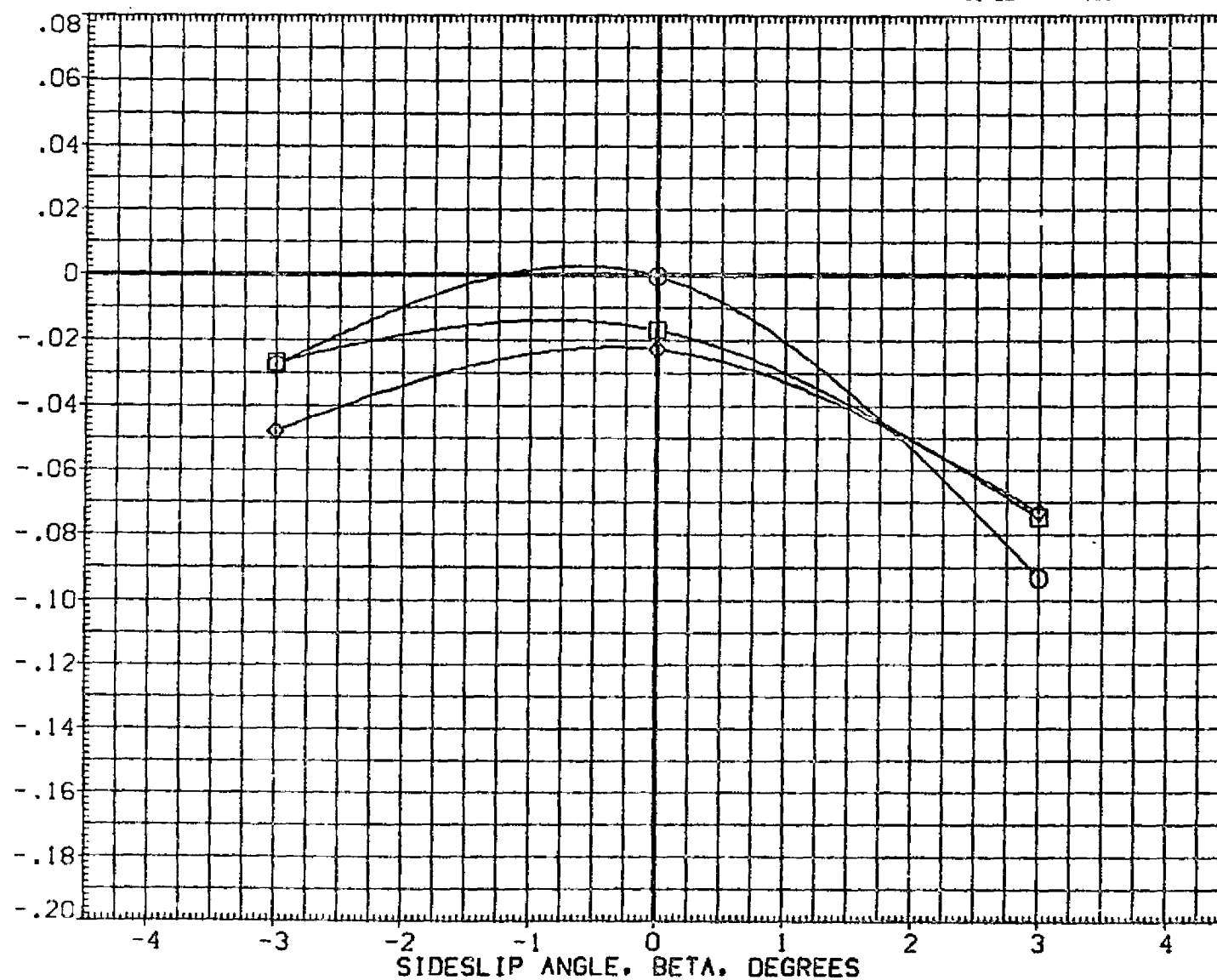


FIGURE 85. AMPLIFICATION FACTOR IN YAW, N78 JETS

SYMBOL	T/OA-1	PARAMETRIC VALUES
○	47.500	MACH 10.330 ALPHA 20.000
□	95.000	BOFLAP .000 T/OA 47.500
◇	190.000	NO.JET 1.000 ELEVON .000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8000	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. 00
YMRP	.0000	IN. 00
ZMRP	375.0000	IN. 20
SCALE	.0100	

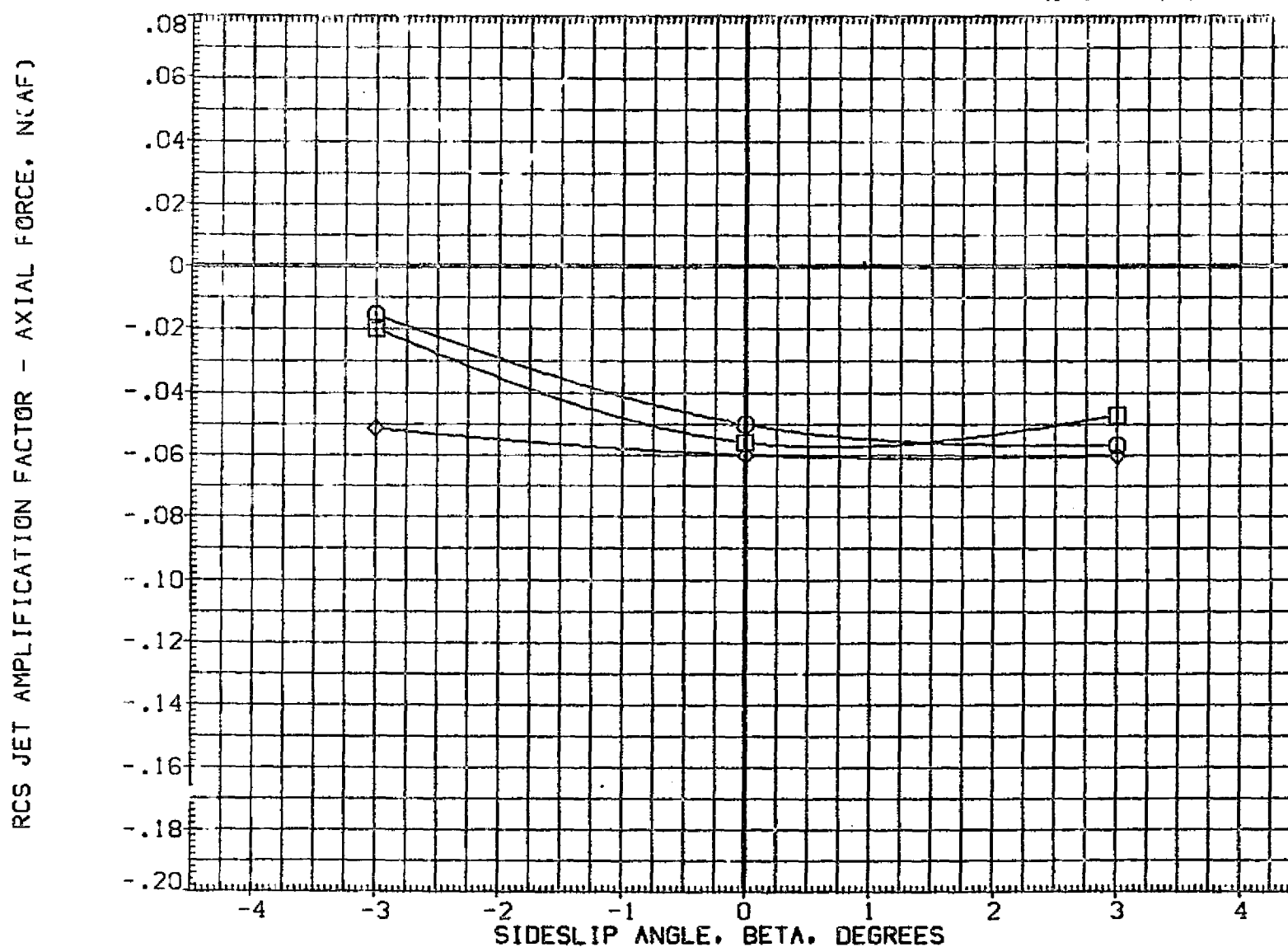


FIGURE 85. AMPLIFICATION FACTOR IN YAW, N78 JETS

01N76

LARC CFHT 116 (MA-22)

(CJA147)

SYMBOL
 ○
 □
 ◇

T/QA-1
 47.500
 95.000
 190.000

MACH
 BDFLAP
 NO.JET

PARAMETRIC VALUES
 10.330 ALPHA 35.000
 .000 T/QA 47.500
 1.000 ELEVON .000

REFERENCE INFORMATION

SREF 2690.0000 SQ.FT.
 LREF 474.8000 INCHES
 BREF 936.6800 INCHES
 XMRP 1076.7000 IN. X0
 YMRP .0000 IN. Y0
 ZMRP 375.0000 IN. Z0
 SCALE .0100

RCS JET AMPLIFICATION FACTOR - AXIAL FORCE, N(AF)

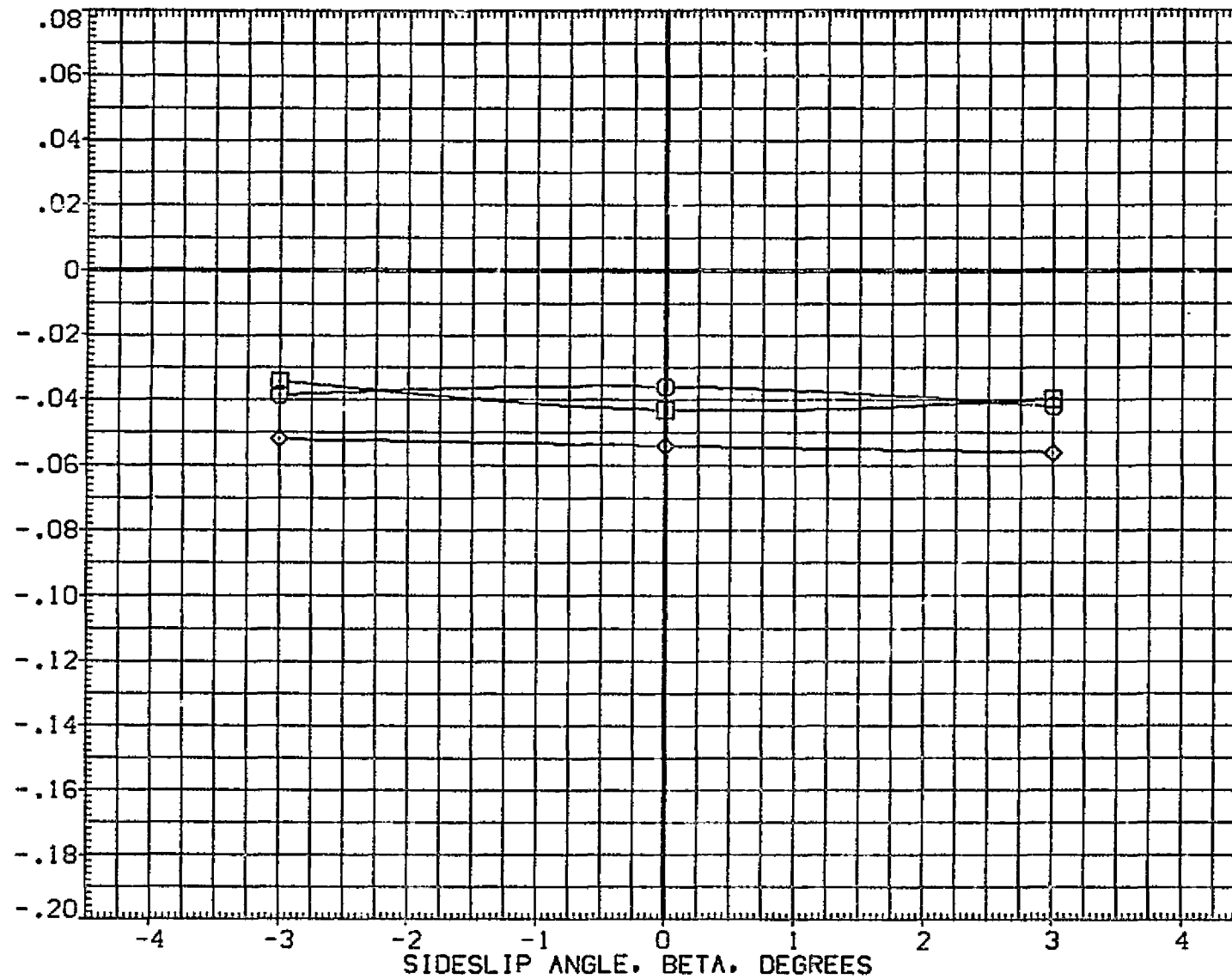


FIGURE 85. AMPLIFICATION FACTOR IN YAW, N78 JETS

SYMBOL	T/QA-1	PARAMETRIC VALUES			
○	47.500	MACH	10.330	ALPHA	-10.000
□	95.000	BDFLAP	.000	T/QA	47.500
◇	190.000	NO.JET	1.000	ELEVON	.000

REFERENCE INFORMATION

BREF	2690.0000	SO.FT.
LREF	474.0000	INCHES
BREF	936.6900	INCHES
XMRP	1076.7000	IN. NO
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - SIDE FORCE, N(SF)

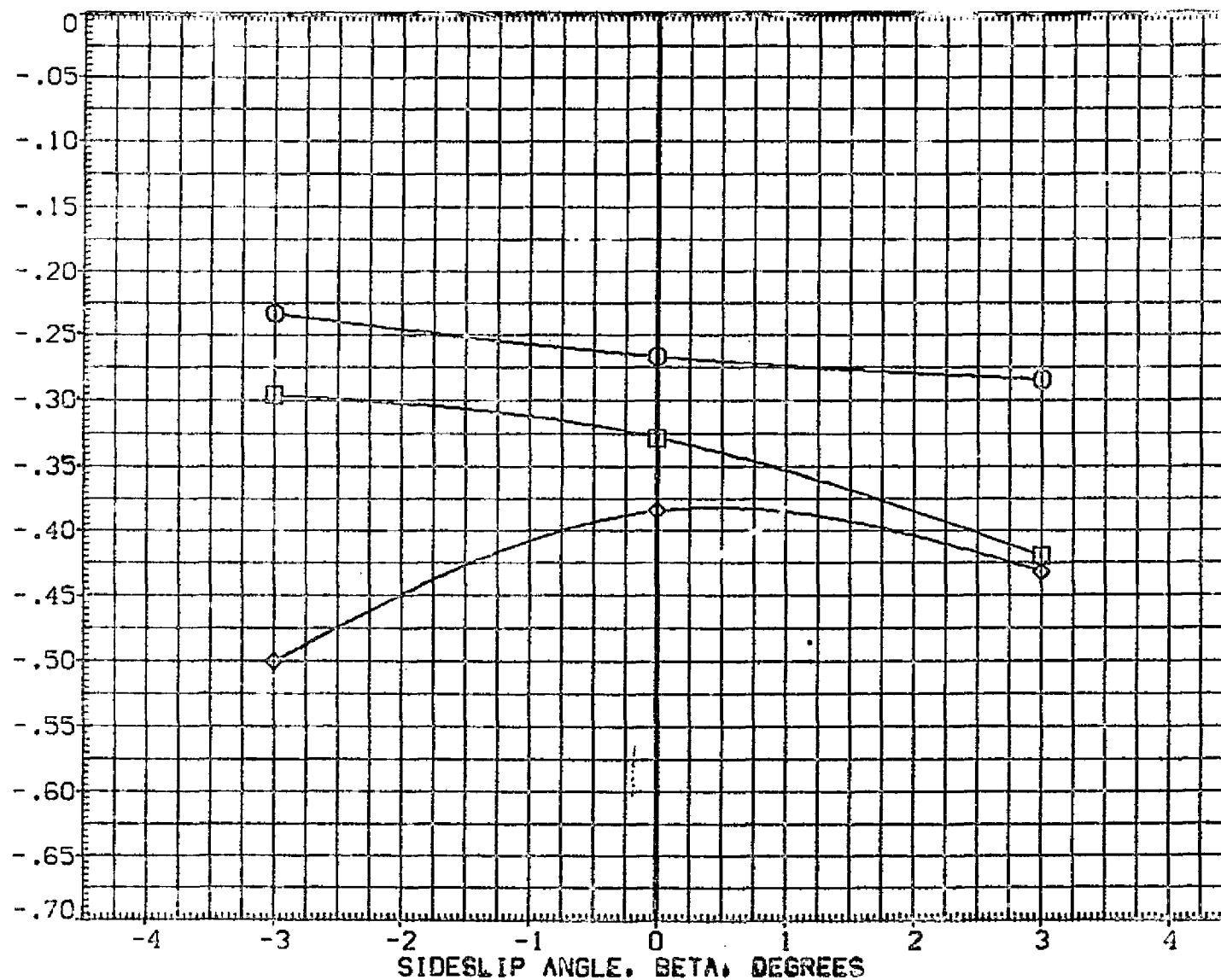


FIGURE 85. AMPLIFICATION FACTOR IN YAW, N78 JETS

01N78

LARC CFHT 118 (MA-22)

(CJA147)

SYMBOL	T/QA-1	PARAMETRIC VALUES
○	47.500	MACH 10.330 ALPHA .000
□	95.000	BDFLAP .000 T/QA 47.500
◇	190.000	NO.JET 1.000 ELEVON .000

REFERENCE INFORMATION		
SREF	2690.0000	50.FT.
LREF	474.8000	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. XZ
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - SIDE FORCE, N(SF)

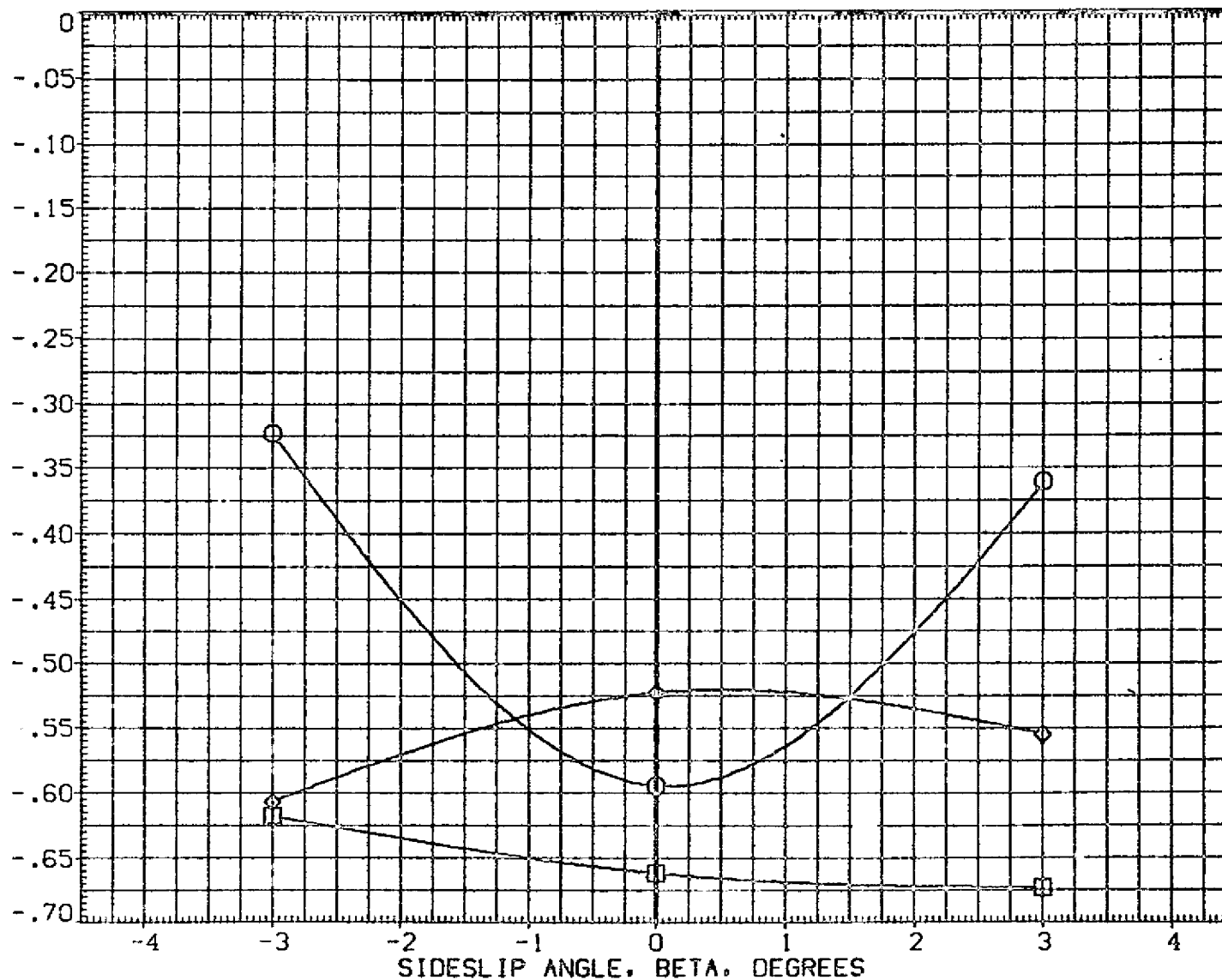


FIGURE 85. AMPLIFICATION FACTOR IN YAW, N78 JETS

SYMBOL

T/QA-1

PARAMETRIC VALUES

○
□
◇

47.500
95.000
190.000

MACH
80FLAP
10.000

10.330
.000
1.000

ALPHA
T/QA
ELEVON

10.000
47.500
.000

REFERENCE INFORMATION

SREF 2680.0000 SQ.FT.
LREF 474.0000 INCHES
BREF 936.6800 INCHES
XMRP 1076.7000 IN. 20
YMRP .0000 IN. YL
ZMRP 375.0000 IN. Z0
SCALE .0100

RCS JET AMPLIFICATION FACTOR - SIDE FORCE, N(SF)

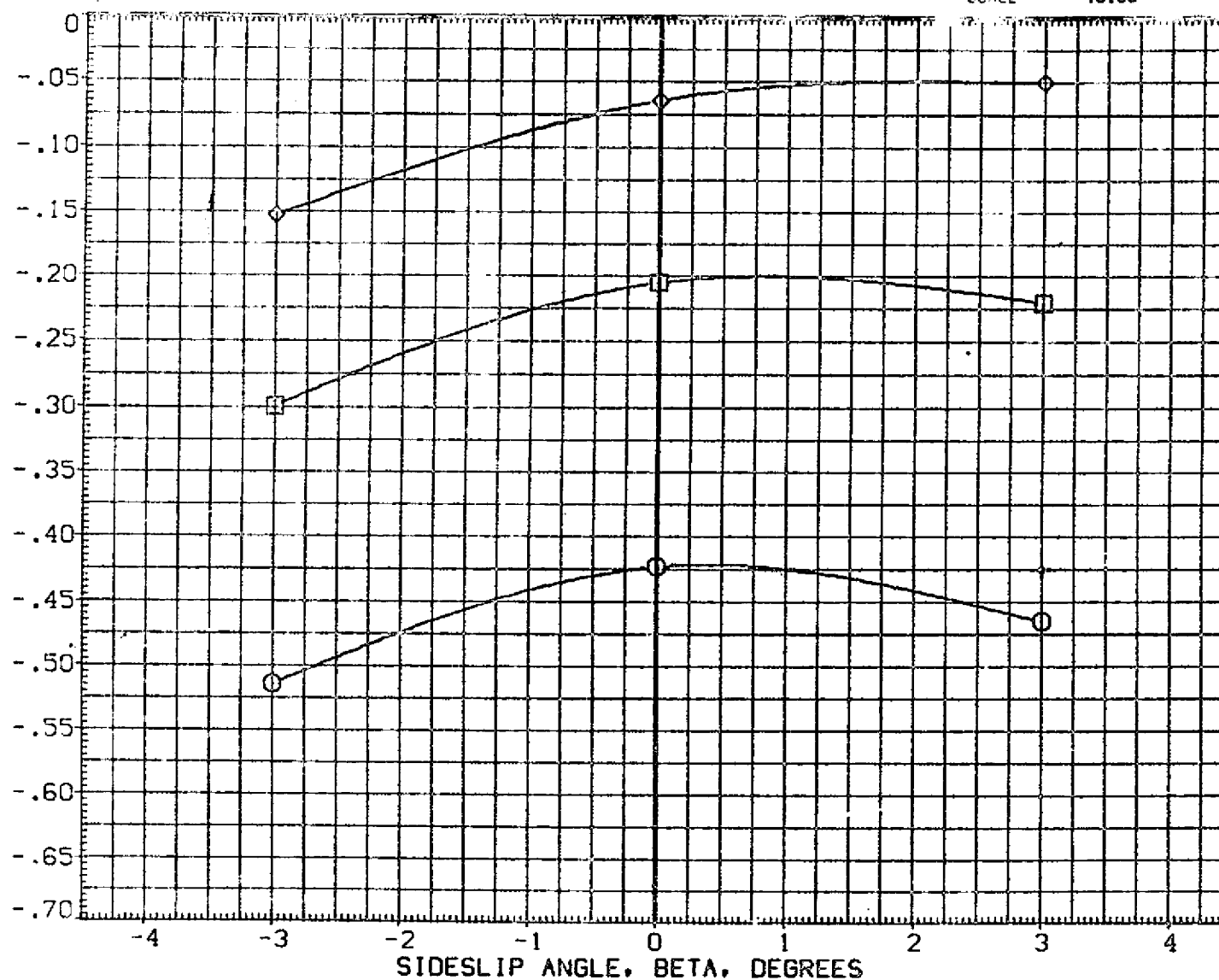


FIGURE 85. AMPLIFICATION FACTOR IN YAW, N78 JETS

01N78

LARC CFHT 118 (MA-22)

(CJA147)

SYMBOL

T/QA-1

PARAMETRIC VALUES

○
□
◇

47.500
95.000
190.000

MACH
BDFLAP
NO. JET

10.330
.000
1.000

ALPHA
T/QA
ELEVON

20.000
47.500
.000

REFERENCE INFORMATION

SREF	2690.0000	50. FT.
LREF	474.8000	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - SIDE FORCE, N(SF)

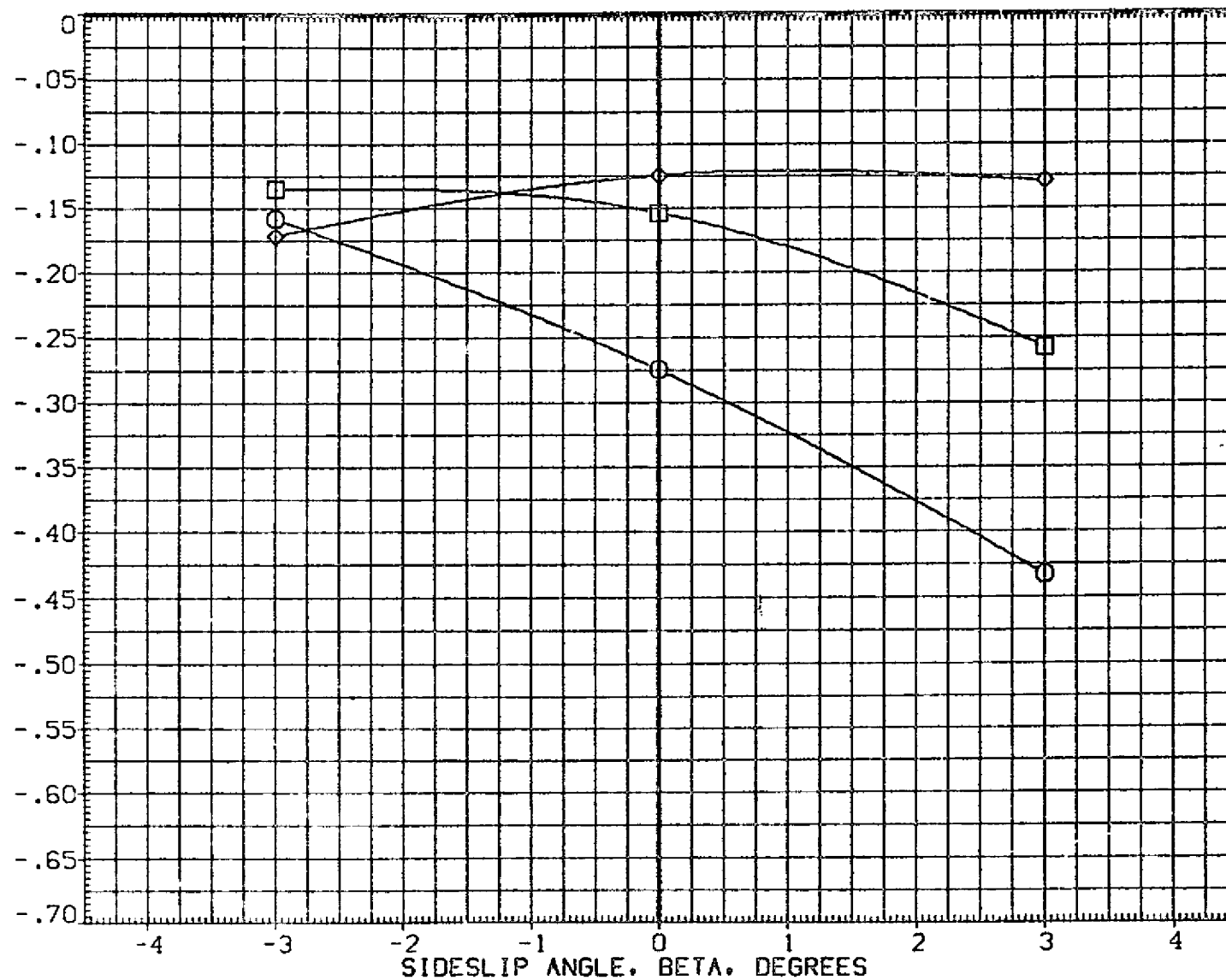


FIGURE 85. AMPLIFICATION FACTOR IN YAW, N78 JETS

SYMBOL		PARAMETRIC VALUES			
◇	T/QA-1	MACH	10.330	ALPHA	35.000
□	47.500	BDFLAP	.000	T/QA	47.500
○	95.000	NOJET	1.000	ELEVON	.000
	190.000				

REFERENCE INFORMATION		
SREF	2690.0000	INCHES
LREF	474.8000	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0100	



FIGURE 85. AMPLIFICATION FACTOR IN YAW, N78 JETS

01N52

LARC CFHT 118 (MA-22)

(CJA156)

SYMBOL

T/OA-1

PARAMETRIC VALUES

○
□
◇

47.500

MACH

10.330

ALPHA

-10.000

95.000

BDPLAP

.000

T/OA

95.000

190.000

NO. JET

2.000

ELEVON

.000

REFERENCE INFORMATION

SREF 2690.0000

SQ. FT.

LREF 474.8000

INCHES

BREF 936.6800

INCHES

XMRP 1076.7000

IN. X0

YMRP .0000

IN. Y0

ZMRP 375.0000

IN. Z0

SCALE .0100

RCS JET AMPLIFICATION FACTOR - PITCH. N(PM)

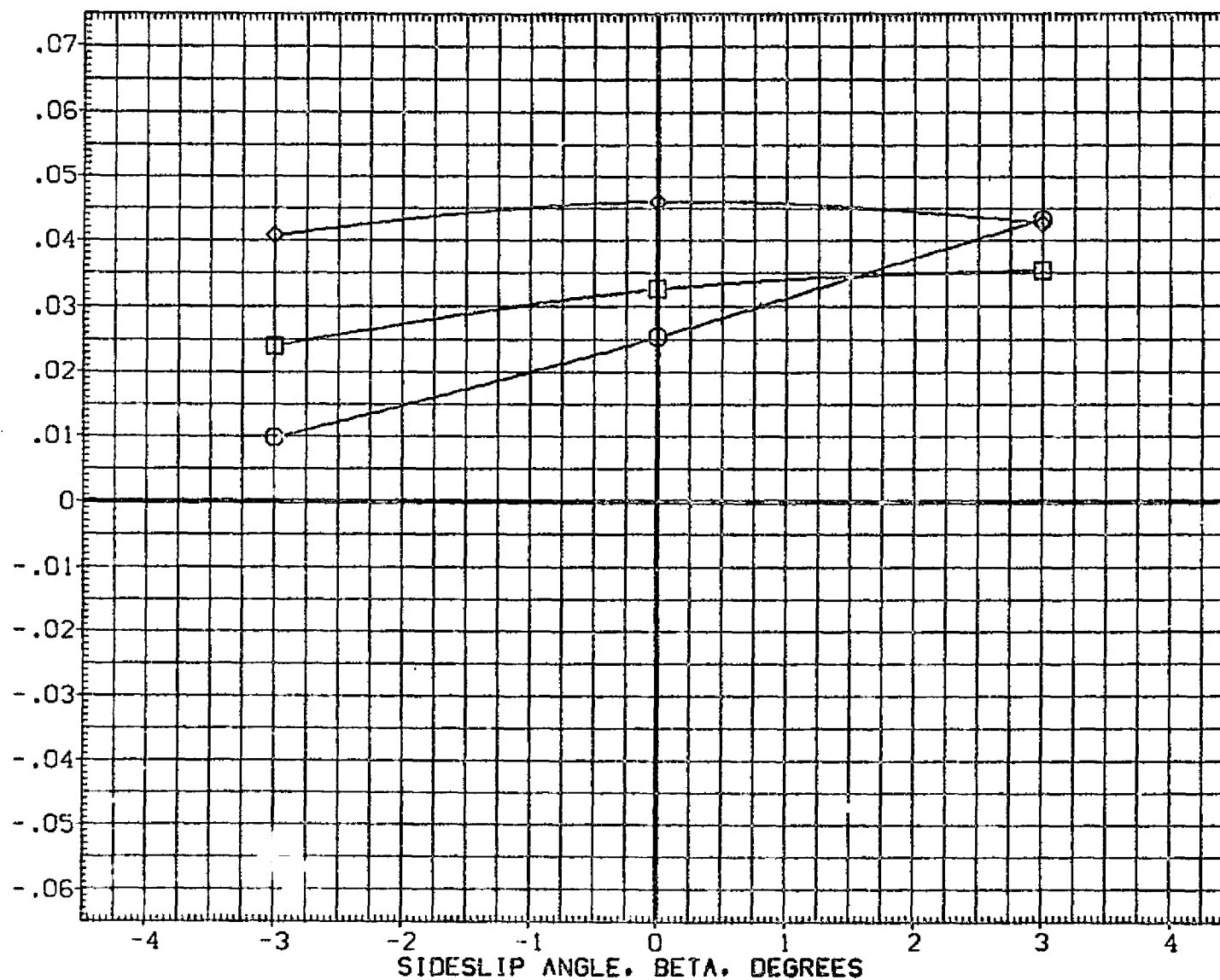


FIGURE 86. AMPLIFICATION FACTOR IN YAW. N52 JETS

SYMBOL	T/QA-1	PARAMETRIC VALUES
○	47.500	MACH 10.330 ALPHA .000
□	95.000	BDPLAP .000 T/QA 95.000
◇	190.000	NO.JET 2.000 ELEVON .000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8000	INCHES
BREF	906.6000	INCHES
XMRP	1016.7000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	305.0000	IN. Z0
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - PITCH, N(PM)

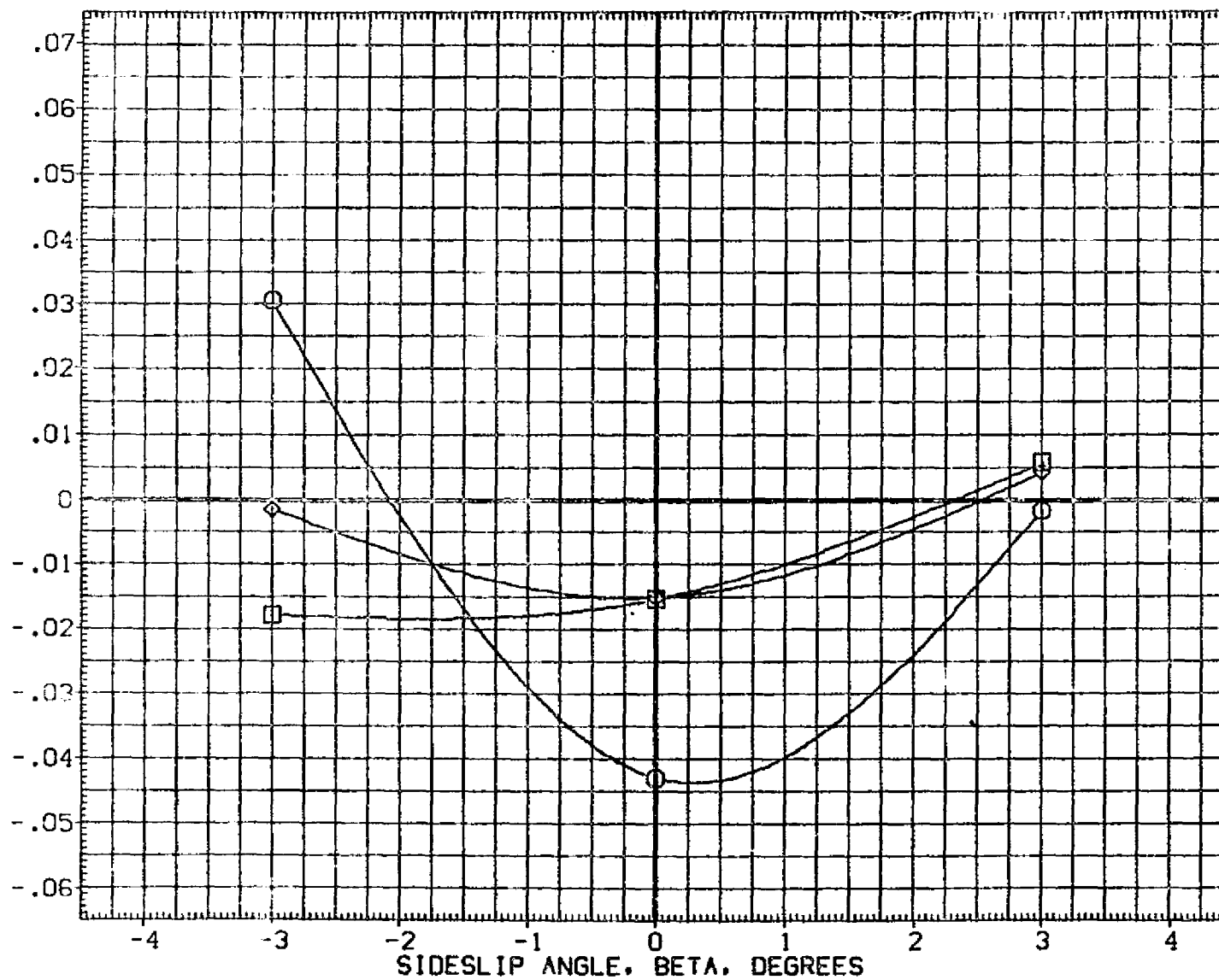


FIGURE 86. AMPLIFICATION FACTOR IN YAW, N52 JETS

01N52

LARC CFHT 118 (MA-22)

(CJA156)

SYMBOL

T/QA-1

PARAMETRIC VALUES

○
□
◇

47.500
95.000
190.000

MACH
BDFLAP
NO.JET

10.330
.000
2.000

ALPHA
T/QA
ELEVON

10.000
95.000
.000

REFERENCE INFORMATION

SREF
LREF
BREF
XMRP
YMRP
ZMRP
SCALE

2690.0000
474.6000
936.6800
1076.7000
.0000
375.0000
.0100

SQ.FT.
INCHES
INCHES
IN. X0
IN. Y0
IN. Z0

RCS JET AMPLIFICATION FACTOR - PITCH, N(PM)

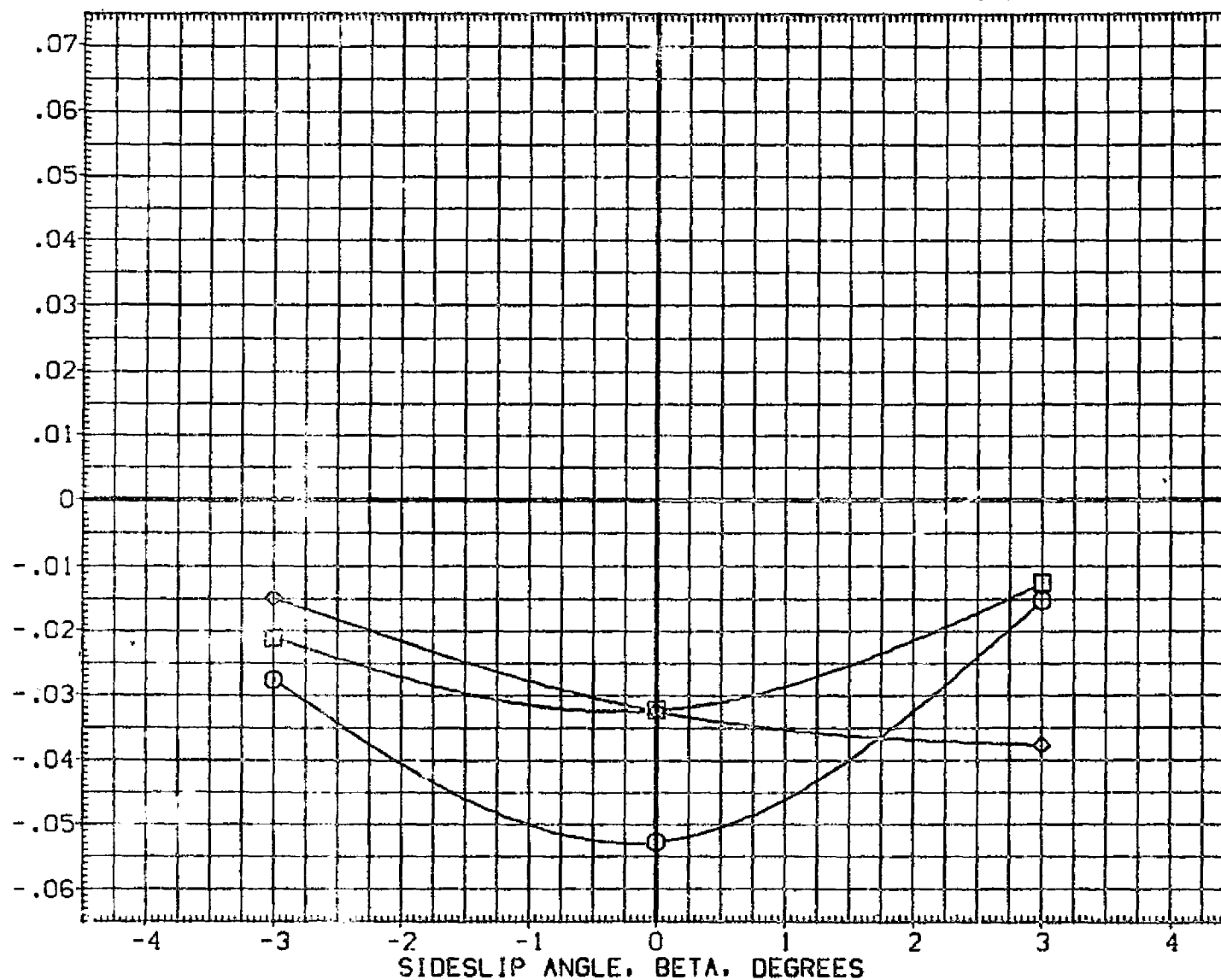


FIGURE 86. AMPLIFICATION FACTOR IN YAW, N52 JETS

SYMBOL

○
□
◇

T/QA-1

47.500

MACH

PARAMETRIC VALUES

10.330

ALPHA

20.000

BDFLAP

.000

T/QA

95.000

NOJET

2.000

ELEVGN

.000

REFERENCE INFORMATION

SREF

2690.0000

SQ.FT.

LREF

474.8000

L.OUES

BREF

936.6800

INCHES

XMRP

1076.7000

IN. X0

YMRP

.0000

IN. Y0

ZMRP

375.0000

IN. Z0

SCALE

.0100

RCS JET AMPLIFICATION FACTOR - PITCH, N(PM)

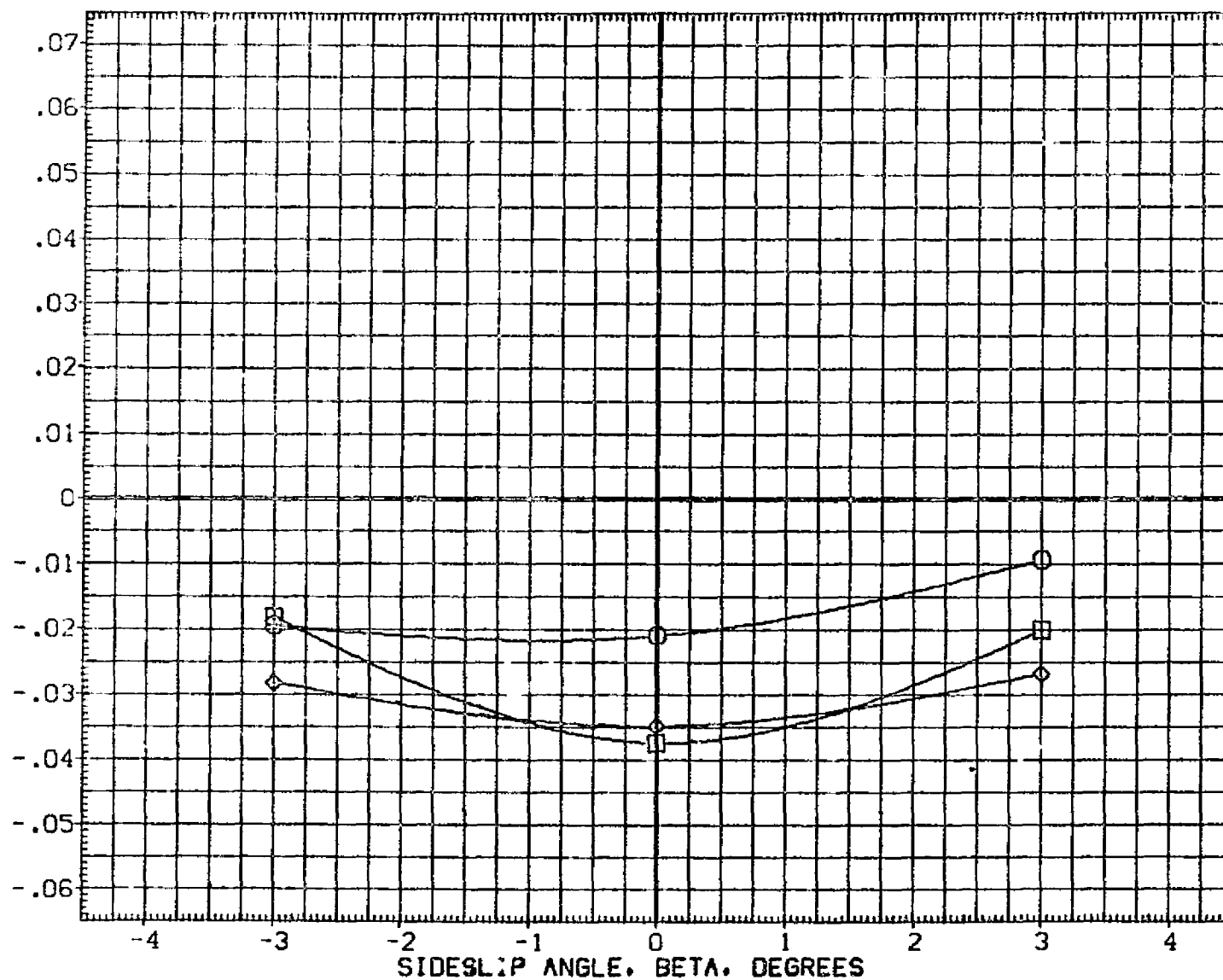


FIGURE 86. AMPLIFICATION FACTOR IN YAW, N52 JETS

01N52

LARC CRHT 118 (MA 22)

(CJA156)

SYMBOL

T/QA-1

PARAMETRIC VALUES

○

47.500

MACH

10.330

ALPHA

35.000

□

95.000

BD FLAP

.000

T/QA

95.000

◇

190.000

NO. JET

2.000

ELEVON

.000

REFERENCE INFORMATION

SREF 2690.0000

SQ. FT.

LREF 474.8000

INCHES

BREF 936.6800

INCHES

XMRP 1076.7000

IN. X0

YMRP .0000

IN. Y0

ZMRP 375.0000

IN. Z0

SCALE .0100

RCS JET AMPLIFICATION FACTOR - PITCH, N(PM)

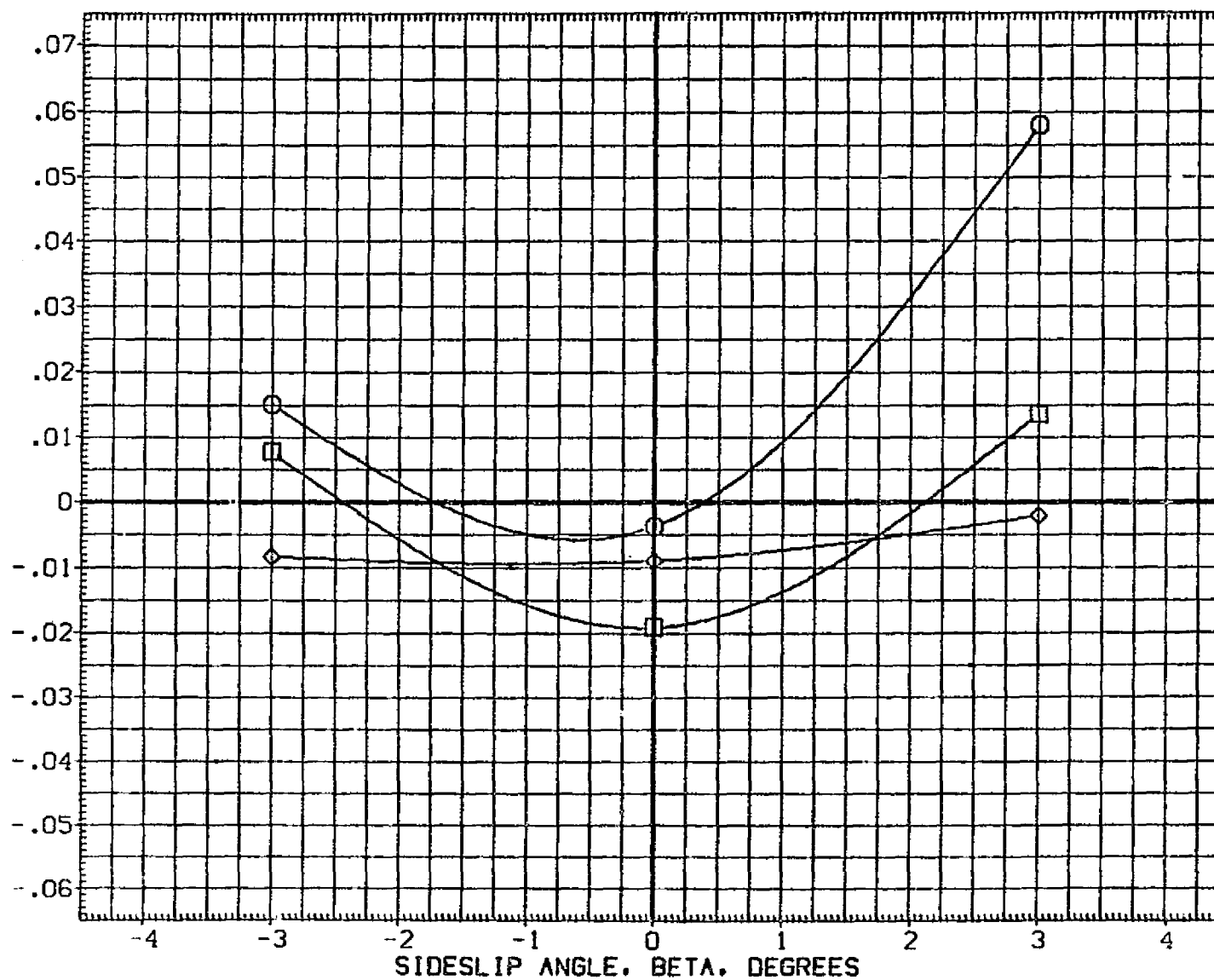


FIGURE 86. AMPLIFICATION FACTOR IN YAW, N52 JETS

SYMBOL	T/QA-1	PARAMETRIC VALUES
○	47.500	MACH 10.330 ALPHA -10.000
□	95.000	BOFLAP .000 T/QA 95.000
◇	190.000	NOJET 2.000 ELEVON .000

REFERENCE INFORMATION		
SREF	2690.0000	50.00 IN.
LREF	474.8000	10.00 IN.
BREF	936.6800	10.00 IN.
XMRP	1076.7000	10.00 IN.
YMRP	.0000	10.00 IN.
ZMRP	375.0000	10.00 IN.
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - ROLL, N(RM)

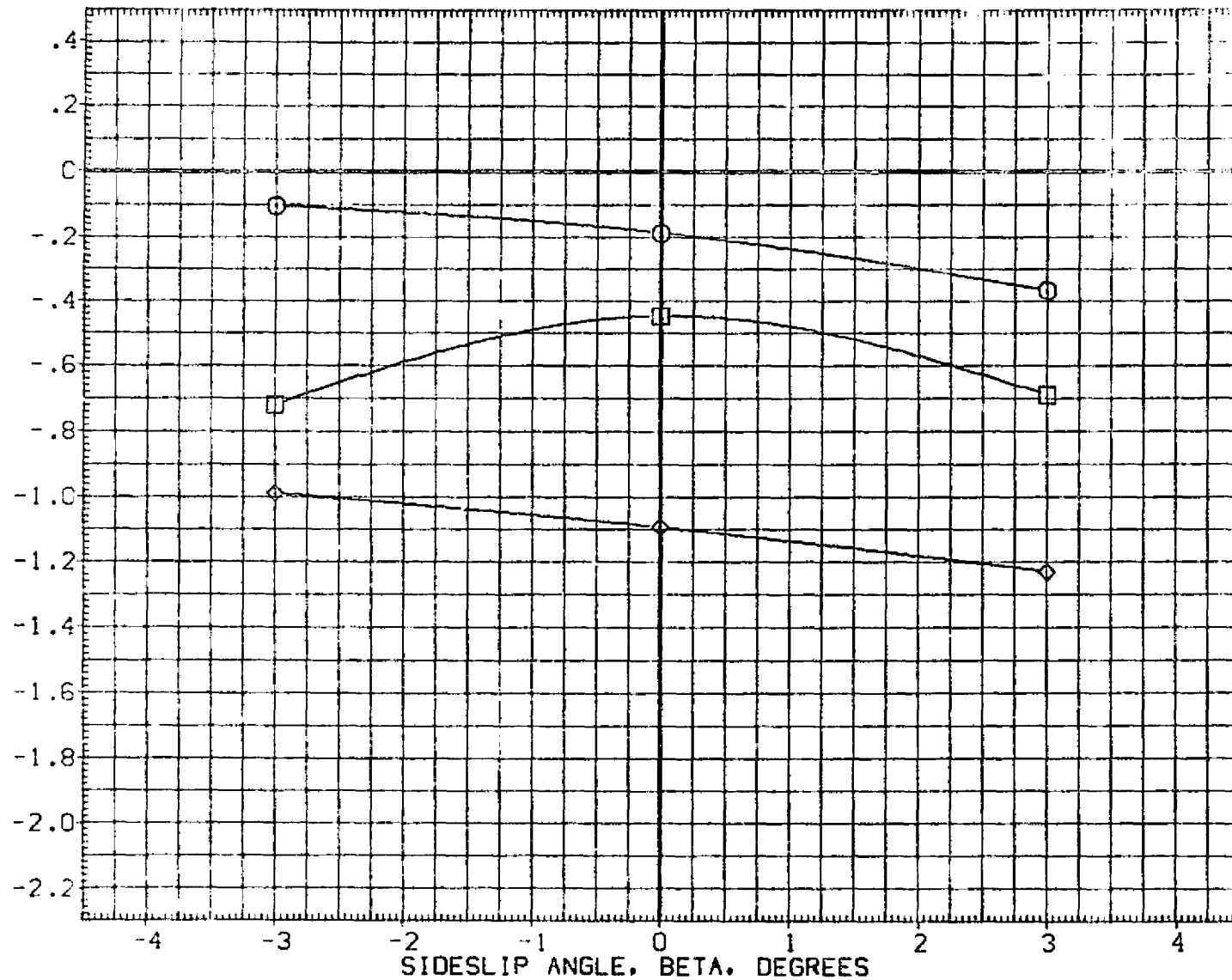


FIGURE 86. AMPLIFICATION FACTOR IN YAW, N52 JETS

01N52

LARC CEHT 119 (MA-22)

(CJA156)

SYMBOL

○
□
◇

T/QA-1

47.500

MACH

PARAMETRIC VALUES

10.330

ALPHA

.000

BDFLAP

.000

T/QA

95.030

NO.JET

2.000

ELEVON

.000

REFERENCE INFORMATION

SREF

2690.0000

SQ.FT.

LREF

474.8000

INCHES

BREF

936.6800

INCHES

XMRP

1076.7000

IN. X0

YMRP

.0000

IN. Y0

ZMRP

375.0000

IN. Z0

SCALE

.0100

RCS JET AMPLIFICATION FACTOR - ROLL, N(RM)

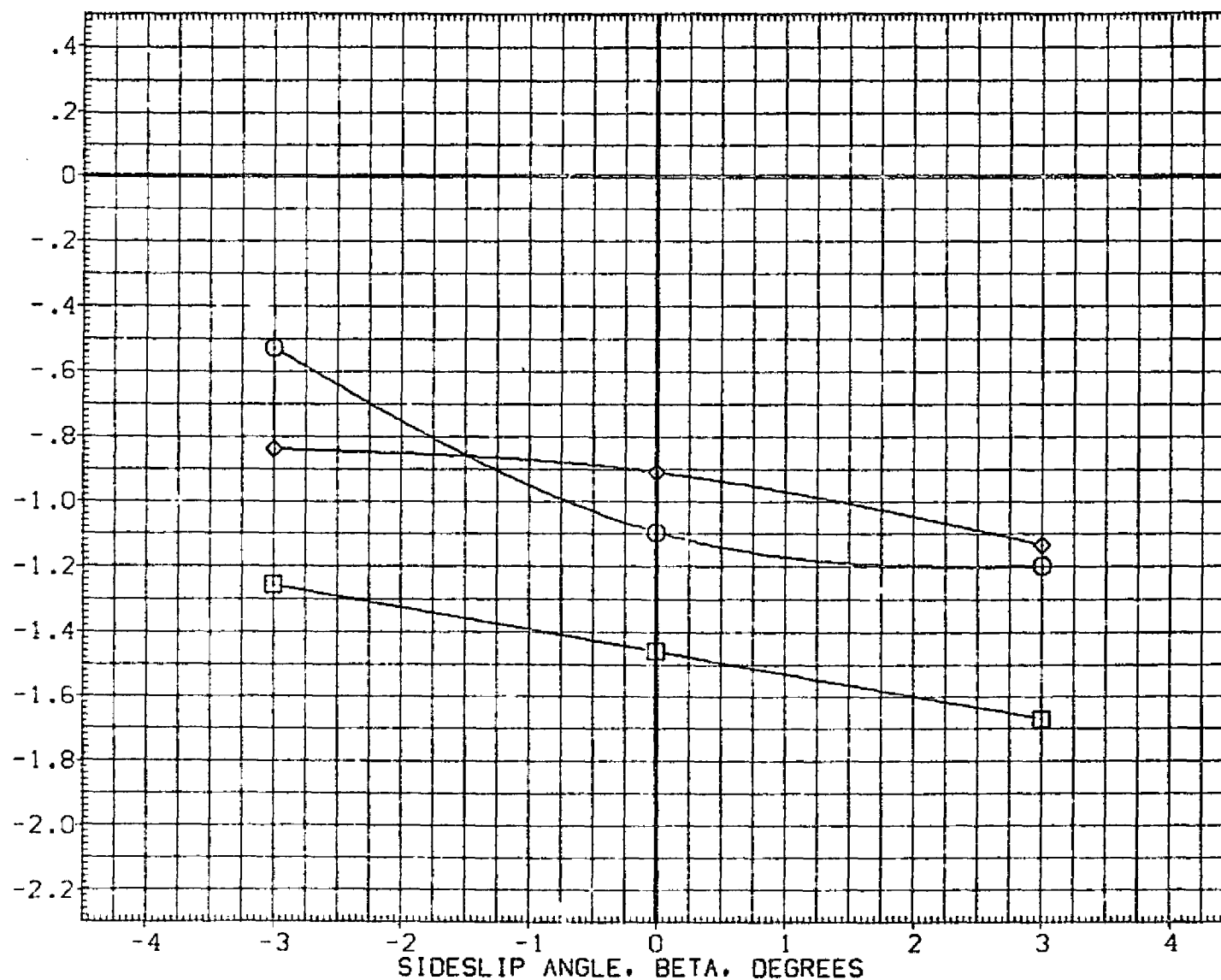


FIGURE 86. AMPLIFICATION FACTOR IN YAW, N52 JETS

SYMBOL	T/OA-1		PARAMETRIC VALUES	
○	47.500	MACH	10.330	ALPHA 10.000
□	95.000	BOFLAP	.000	T/OA 95.000
◇	190.000	NJ.JET	2.000	ELEVON .000

REFERENCE INFORMATION	
SREF	7690.0000 50. ST.
LREF	474.8000 10.000
BREF	936.6800 10.000
XMRP	1076.7000 IN. X0
YMRP	.0000 IN. Y0
ZMRP	375.0000 IN. Z0
SCALE	.0100

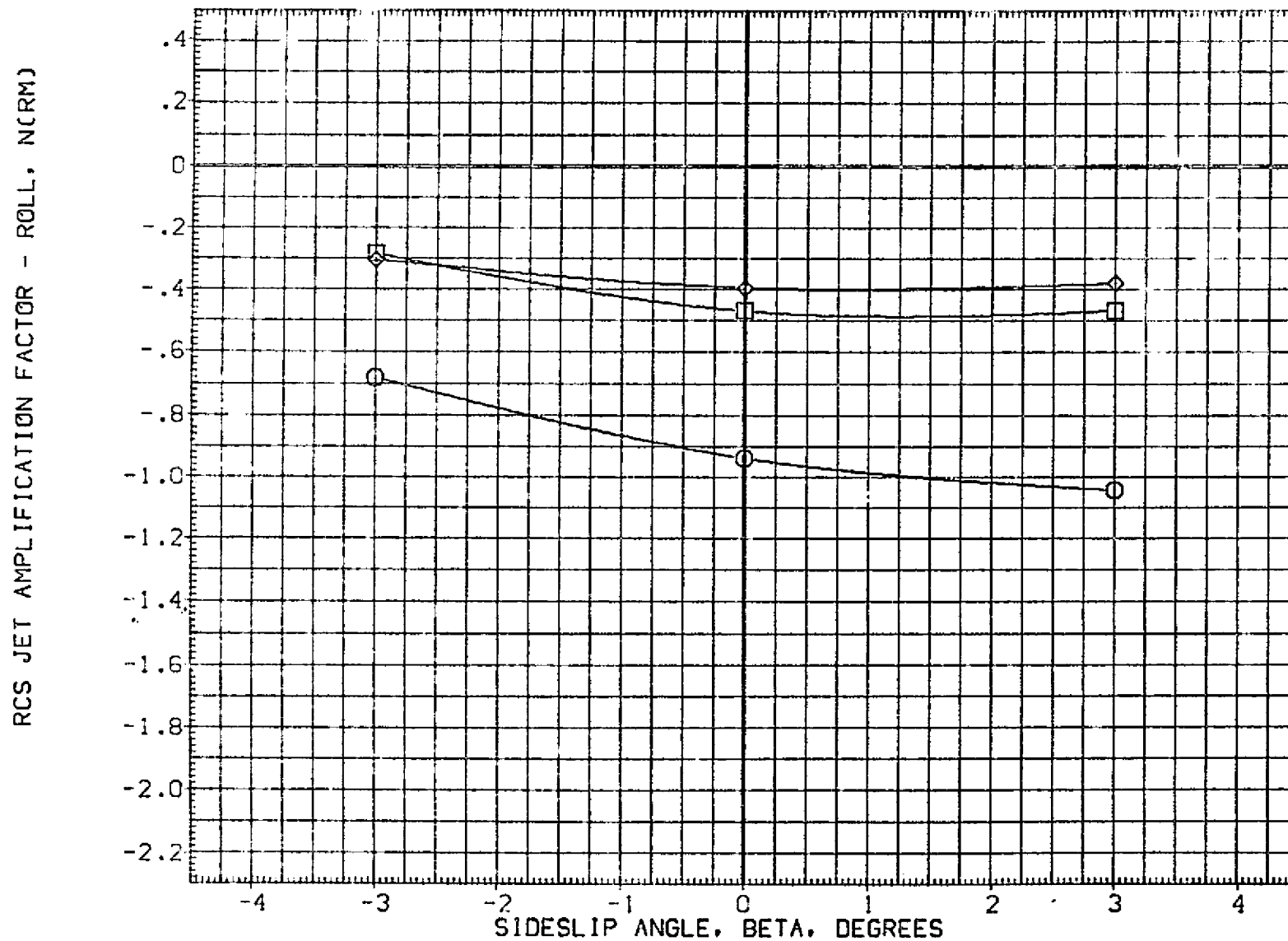


FIGURE 86. AMPLIFICATION FACTOR IN YAW, N52 JETS

01N52

LARC CFHT 118 (MA-22)

(CJA156)

SYMBOL	T/QA-1	PARAMETRIC VALUES			
○	47.500	MACH	10.330	ALPHA	20.000
□	95.000	BDFLAP	.000	T/QA	95.000
◇	190.000	NO.JET	2.000	ELEVON	.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8000	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - ROLL, NCRM

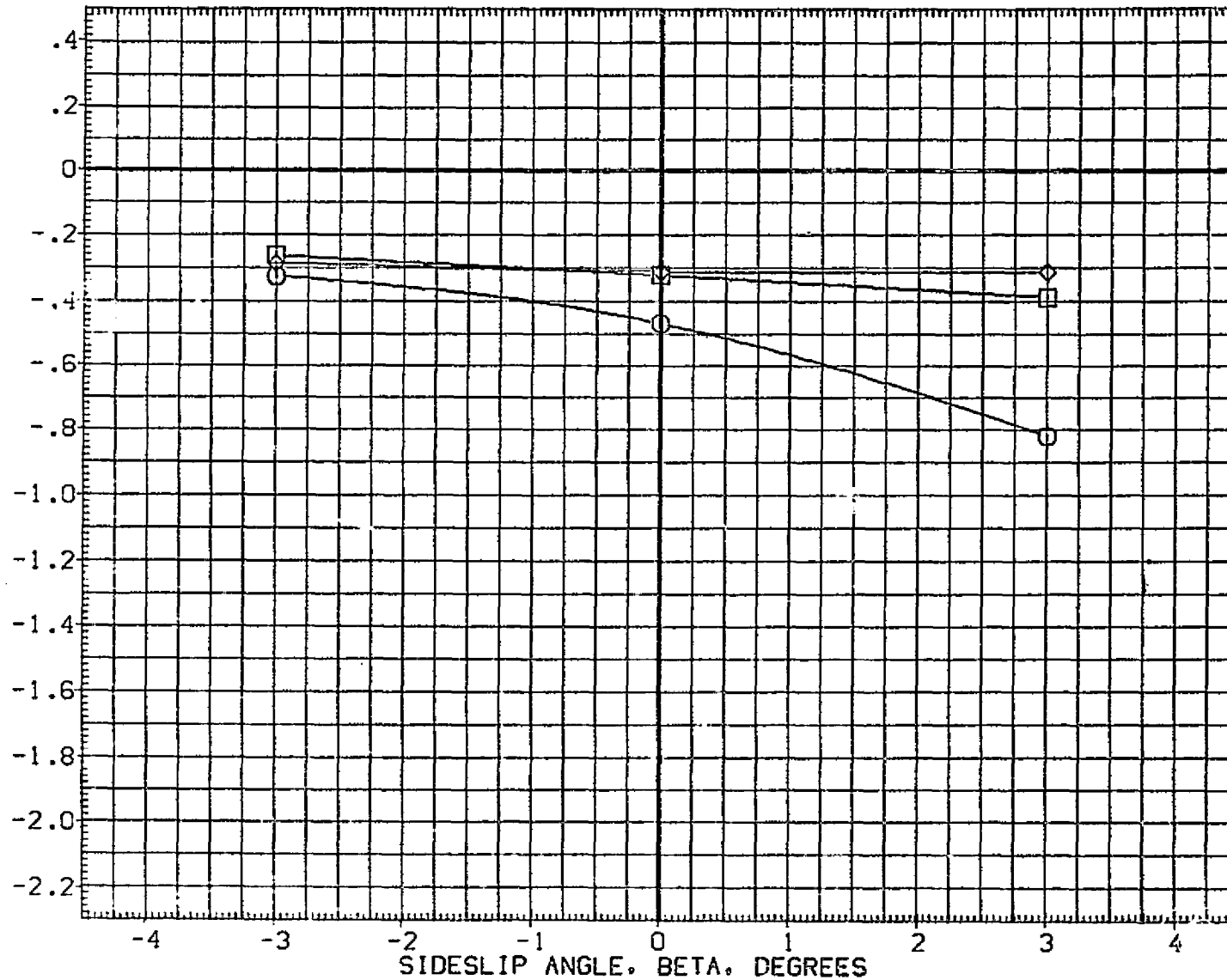


FIGURE 86. AMPLIFICATION FACTOR IN YAW, N52 JETS

SYMBOL	T/OA-1	PARAMETRIC VALUES
○	47.500	MACH 10.330 ALPHA 35.000
□	95.000	BD FLAP .000 T/OA 95.000
◇	190.000	NO JET 2.000 ELEVON .000

REFERENCE INFORMATION		
SREF	2650.0000	IN. FT.
LREF	474.8000	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - ROLL, NCRM

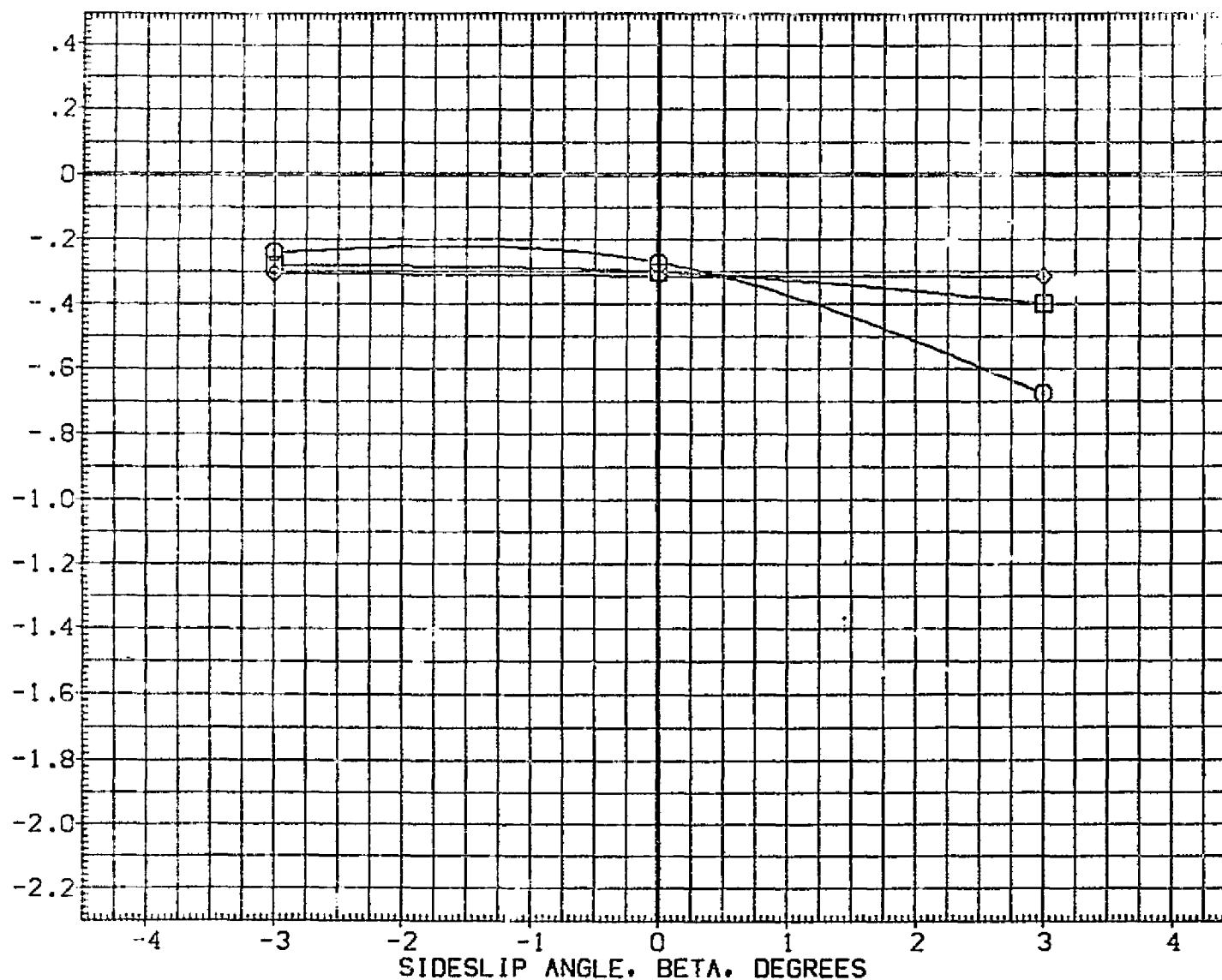


FIGURE 86. AMPLIFICATION FACTOR IN YAW, N52 JETS

01N52

LARC CFHT 118 (MA-22)

(CJA156)

SYMBOL	T/QA-1	PARAMETRIC VALUES
○	47.500	MACH 10.330 ALPHA -10.000
□	95.000	BDFLAP .000 T/QA 95.000
◇	190.000	NOJET 2.000 ELEVON .000

REFERENCE INFORMATION		
SREF	2690.0000	50.FT.
LREF	474.8000	INCHES
BREF	936.6300	INCHES
XMRP	1076.7000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - YAW, N(YM)

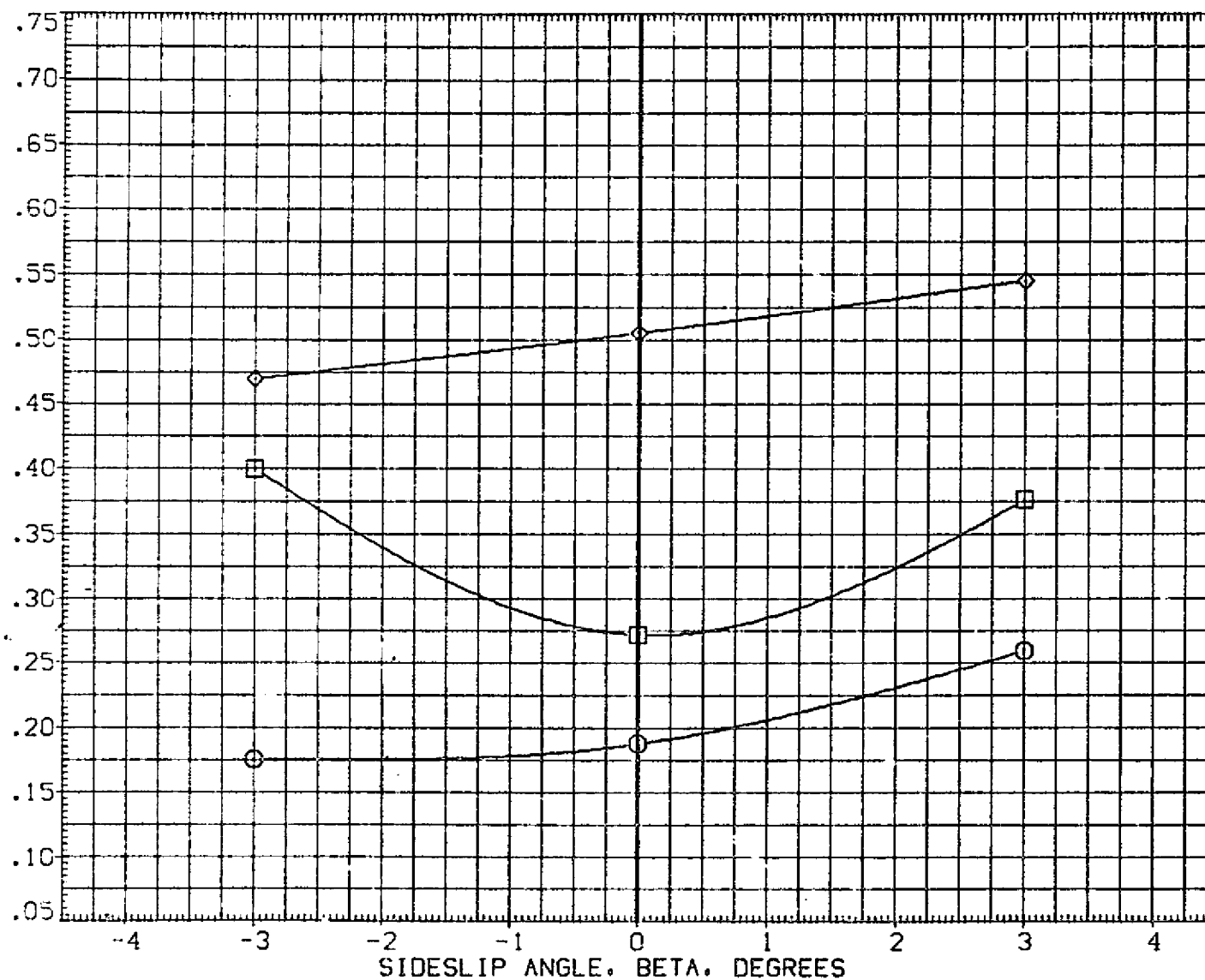


FIGURE 86. AMPLIFICATION FACTOR IN YAW, N52 JETS

SYMBOL	T/QA-1	PARAMETRIC VALUES
○	47.500	MACH 10.330 ALPHA .000
□	95.000	BCFLAP .000 T/QA 95.000
◇	190.000	NO. OF 7.000 ELEVON .000

REFERENCE INFORMATION		
SREF	500.0000	50. FT.
IREF	474.8000	INCHES
EREF	936.6800	INCHES
MRP	1076.7000	IN. X0
MRP	.0000	IN. Y0
MRP	375.0000	IN. Z0
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - YAW, N(YM)

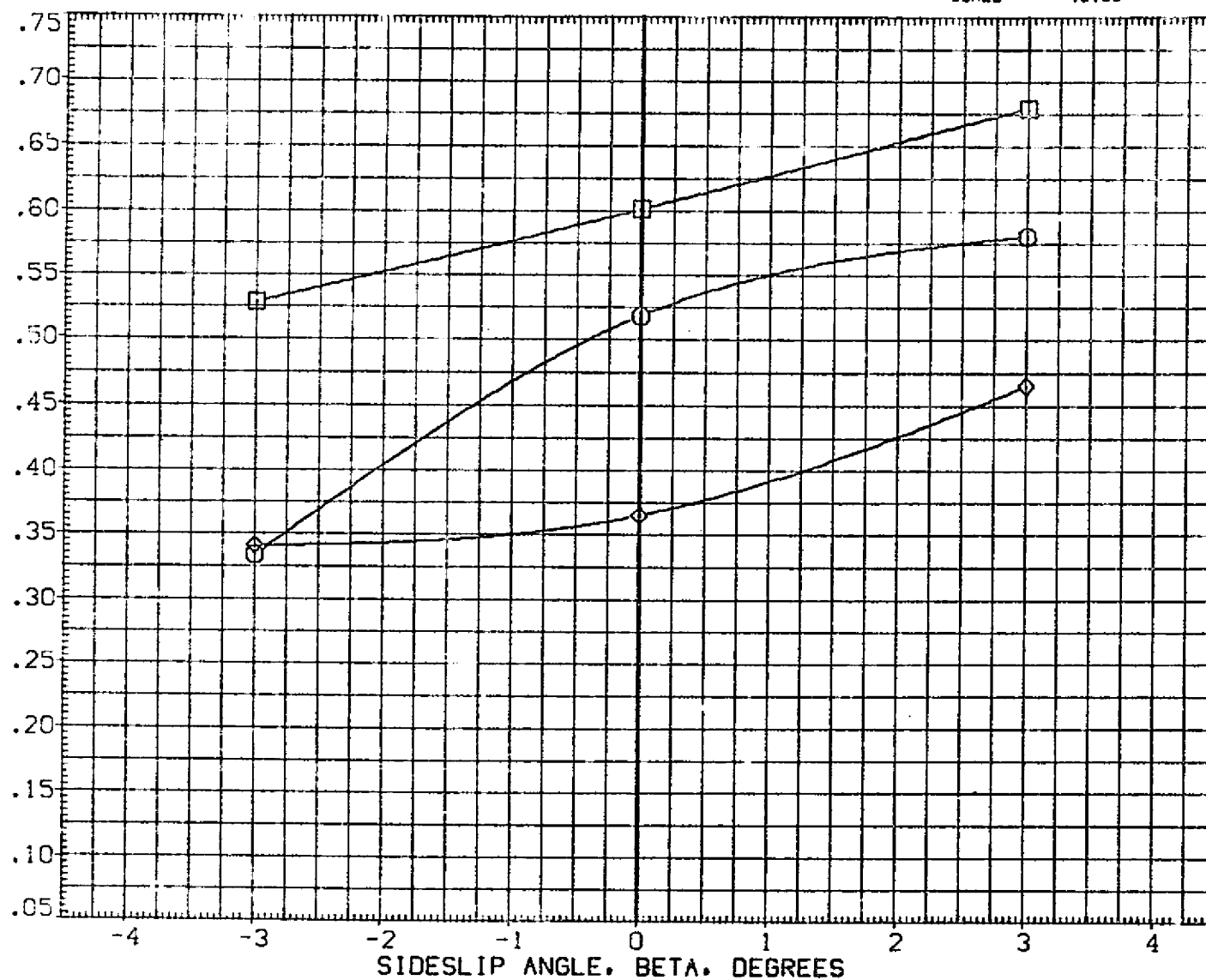


FIGURE 86. AMPLIFICATION FACTOR IN YAW, N52 JETS

01N52

LARC CFHT 118 (MA-22)

(CJA156)

SYMBOL	T/OA-1	PARAMETRIC VALUES
○	47.500	MACH 10.330 ALPHA 10.000
□	95.000	BDFLAP .000 T/OA 95.000
◇	190.000	NO JET 2.000 ELEVON .000

REFERENCE INFORMATION	
SREF	2690.0000 SQ.FT.
LREF	474.8000 INCHES
BREF	936.6800 INCHES
XMRP	1076.7000 IN. X0
YMRP	.0000 IN. Y0
ZMRP	375.0000 IN. Z0
SCALE	.0100

RCS JET AMPLIFICATION FACTOR - YAW, N(YM)

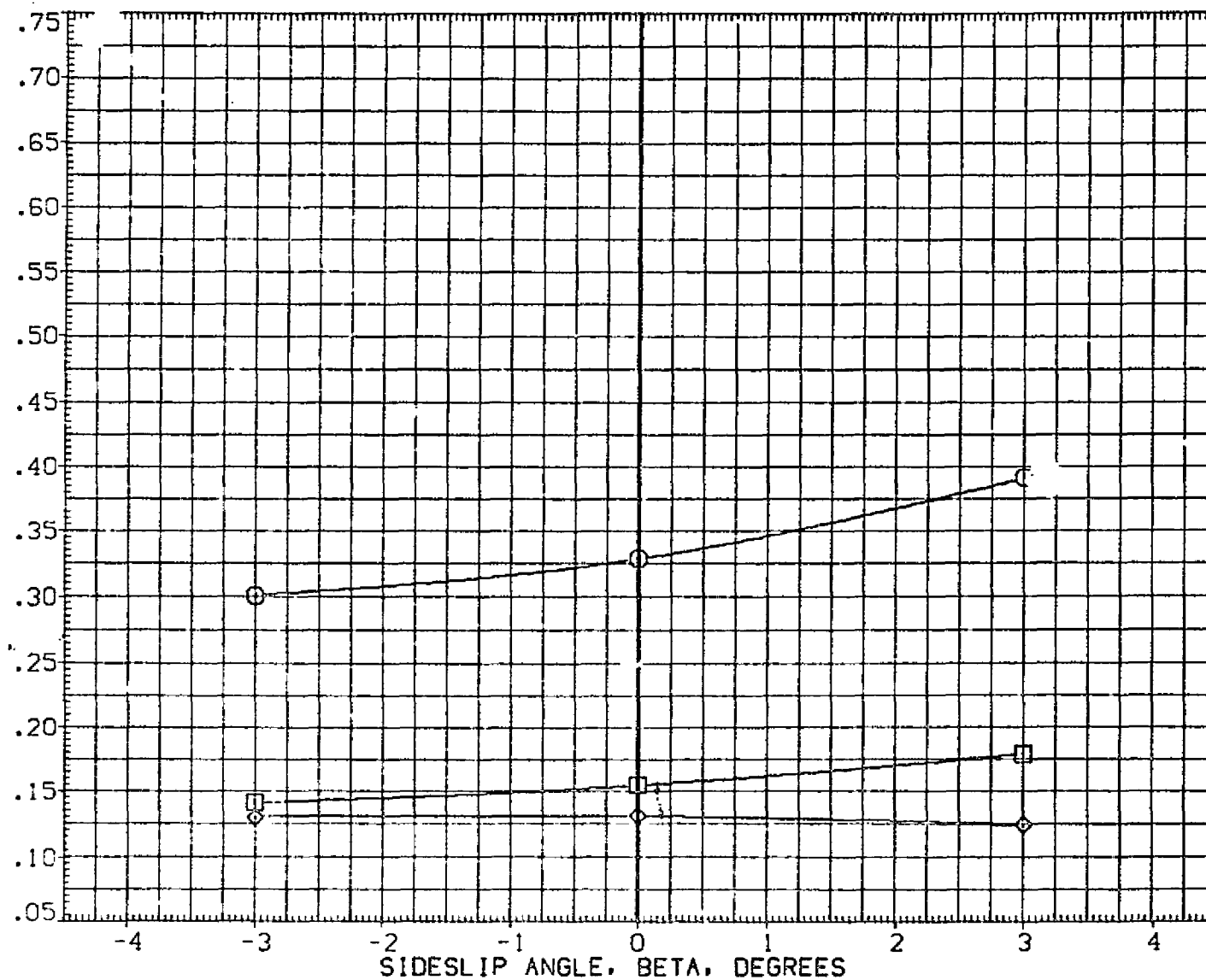


FIGURE 86. AMPLIFICATION FACTOR IN YAW, N52 JETS

SYMBOL		T/QA-1		PARAMETRIC VALUES	
○	47.500	MACH	10.330	ALPHA	20.000
□	95.000	BOFLAP	.000	T/QA	95.000
◇	190.000	NOJET	2.000	ELEVON	.000

REFERENCE INFORMATION	
SREF	2590.0000
LREF	174.8000
BREF	970.6800
XMRP	1076.7000
YMRP	.0000
ZMRP	375.0000
SCALE	.0100

RCS JET AMPLIFICATION FACTOR - YAW, N(YM)

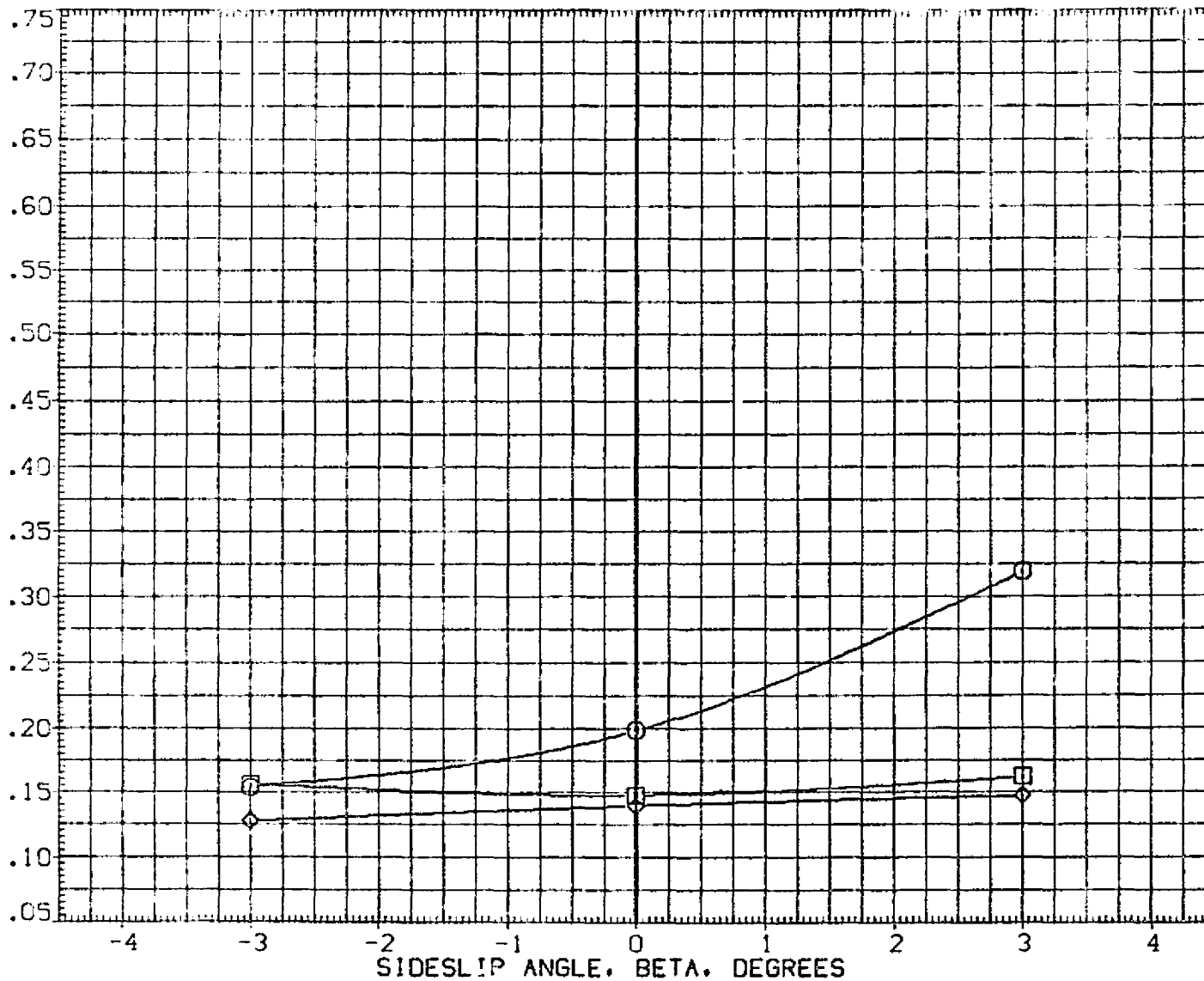


FIGURE 86. AMPLIFICATION FACTOR IN YAW, N52 JETS

01N52

LARC CFHT 118 (MA-22)

(CJA156)

SYMBOL

○
□
◇

T/OA-1

47.500

MACH

95.000

190.000

NO JET

PARAMETRIC VALUES

10.330

ALPHA

35.000

T/OA

95.000

ELEVON

.000

REFERENCE INFORMATION

SREF 2690.0000

SQ. FT.

LREF 474.8000

INCHES

BREF 936.6800

INCHES

XMRP 1076.7000

IN. X0

YMRP .0000

IN. Y0

ZMRP 375.0000

IN. Z0

SCALE .0100

RCS JET AMPLIFICATION FACTOR - YAW, N52 JETS

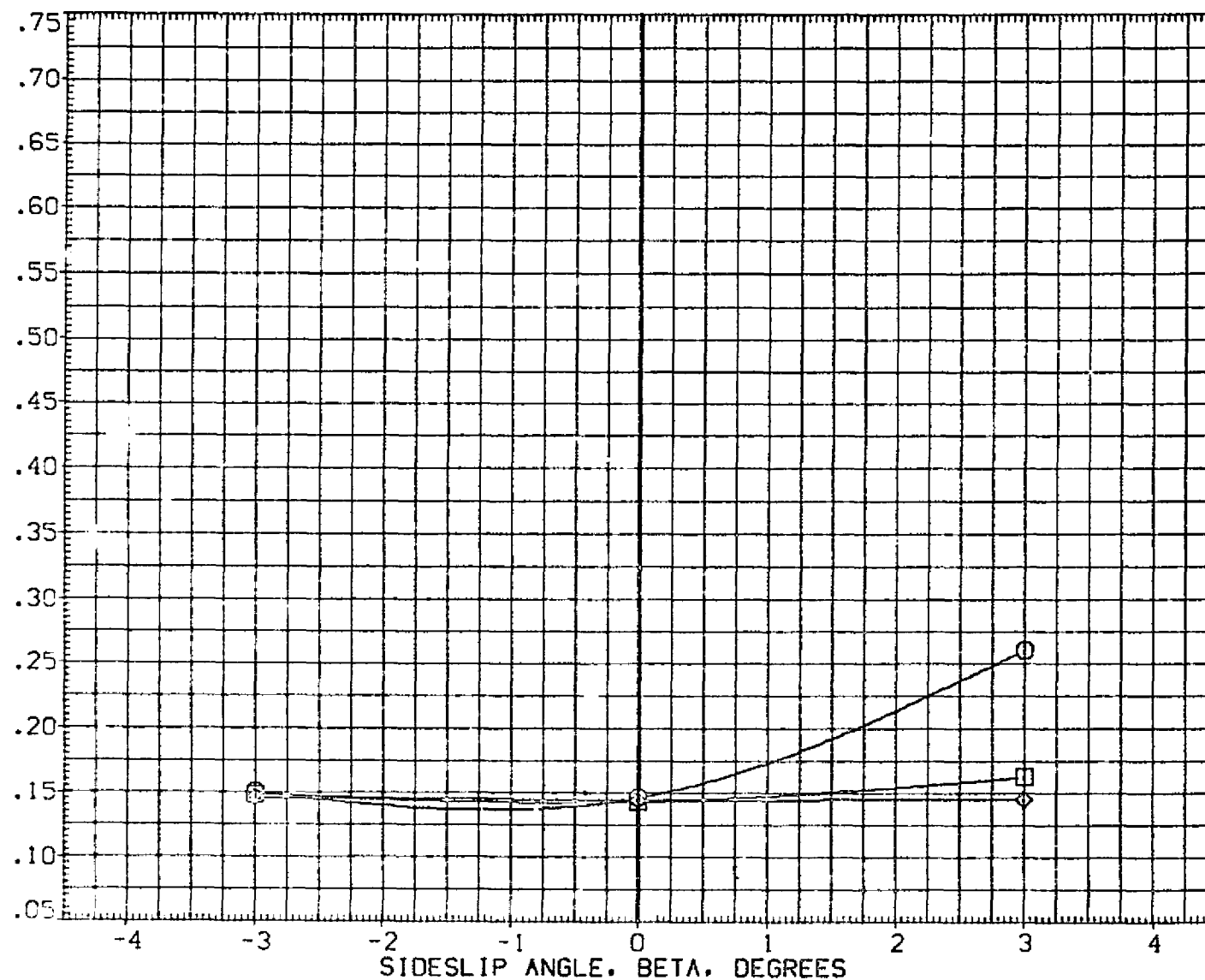


FIGURE 86. AMPLIFICATION FACTOR IN YAW, N52 JETS

S. 000L

○
□
◇

T/OA-1

47.500

MACH

PARAMETRIC VALUES

10.330

ALPHA

-10.000

BOFLAP

.000

T/OA

95.000

NO. JET

2.000

ELEVON

.000

REFERENCE INFORMATION

SREF

2690.0000

00.00

LRFF

474.8000

00.00

3.00

936.6800

00.00

XREF

1076.7000

00.00

YREF

.0000

00.00

ZREF

375.0000

00.00

SCALE

.0100

RCS JET AMPLIFICATION FACTOR - NORMAL FORCE, N(NF)

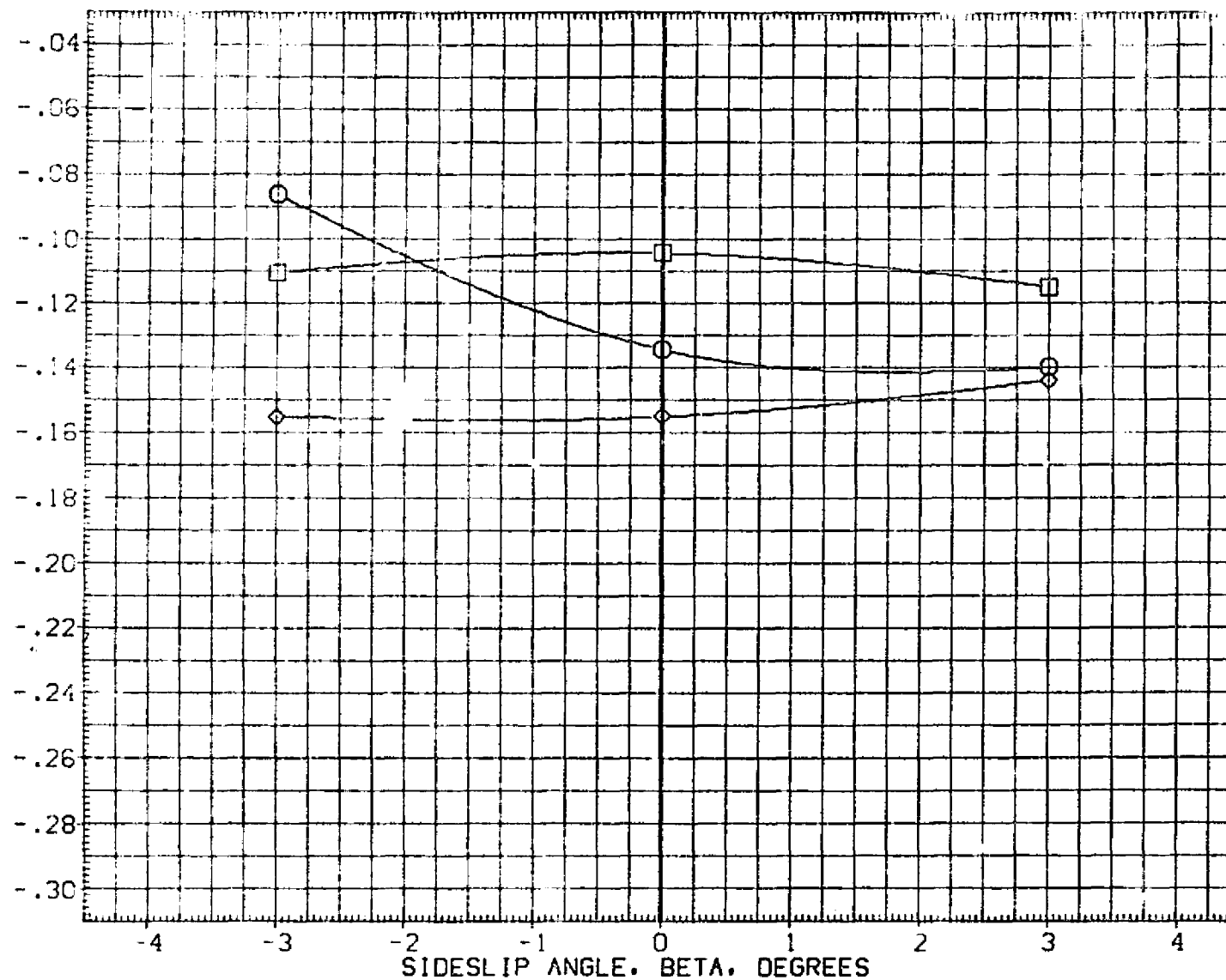


FIGURE 86. AMPLIFICATION FACTOR IN YAW, N52 JETS

01N52

LARC CFHT 118 (MA-22)

(CJA156)

SYMBOL	T/OA-1	MACH	PARAMETRIC VALUES	ALPHA	T/OA
○	47.500	10.330	.000	.000	95.000
□	95.000	.000	2.000	.000	
◇	190.000	NO JET			

REFERENCE INFORMATION	
SREF	2690.0000 SQ.FT.
LREF	474.0000 INCHES
BREF	936.6800 INCHES
XMRP	1076.7000 IN. X0
YMRP	.0000 IN. Y0
ZMRP	375.0000 IN. Z0
SCALE	.0100

RCS JET AMPLIFICATION FACTOR - NORMAL FORCE, N(NF)

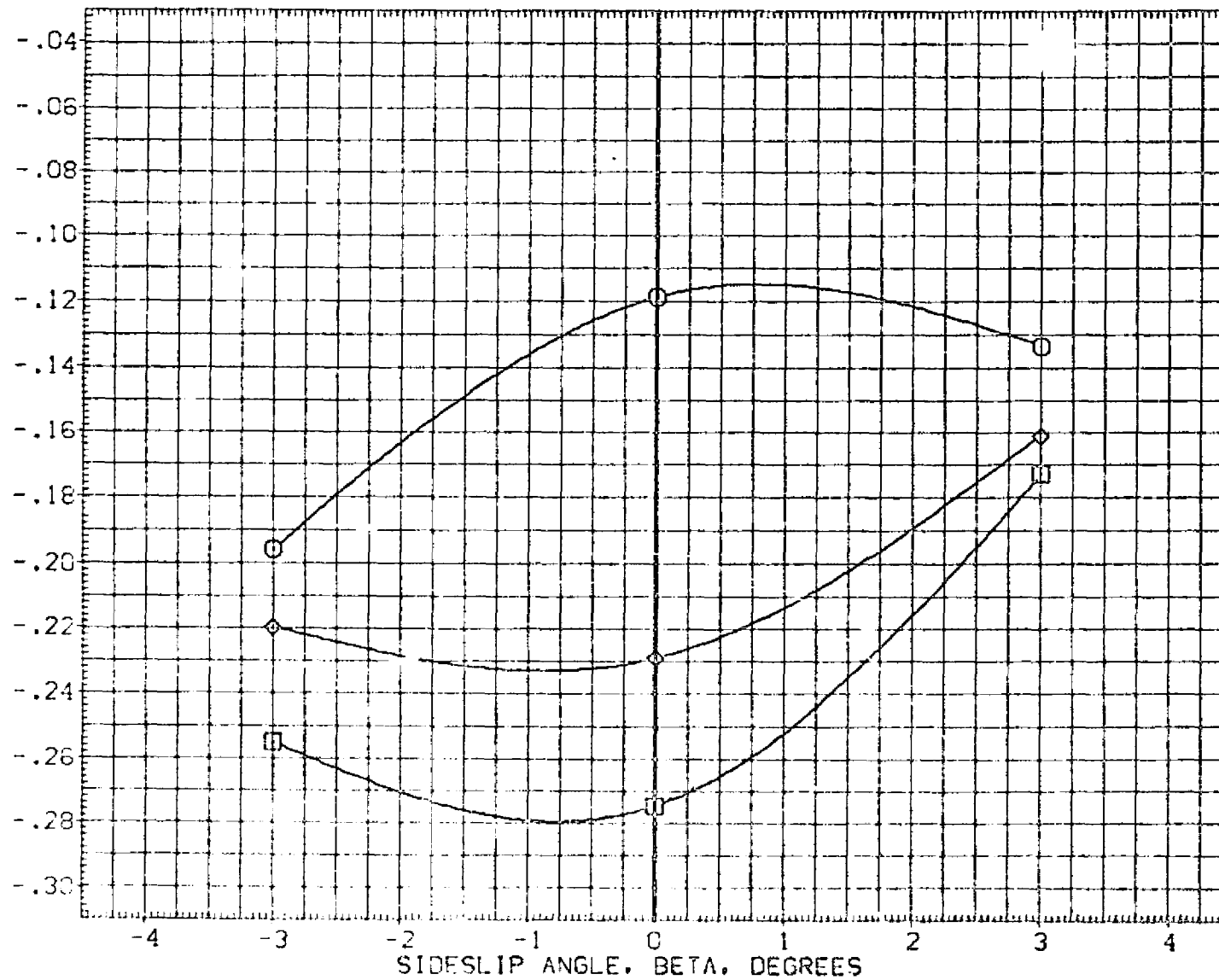


FIGURE 86. AMPLIFICATION FACTOR IN YAW, N52 JETS

SYMBOL	T/QA-1	PARAMETRIC VALUES
○	47.500	MACH 10.330 ALPHA 10.000
□	95.000	BDFLAP .000 T/QA 95.000
◇	190.000	NO JET 2.000 ELEVON .000

REFERENCE INFORMATION		
SREF	2880.0000	SQ.FT.
LPEF	474.8000	INCHES
BREF	936.6800	INCHES
XGRP	1076.7000	INCHES
YGRP	.0000	INCHES
ZGRP	375.0000	INCHES
SCALE	.0100	

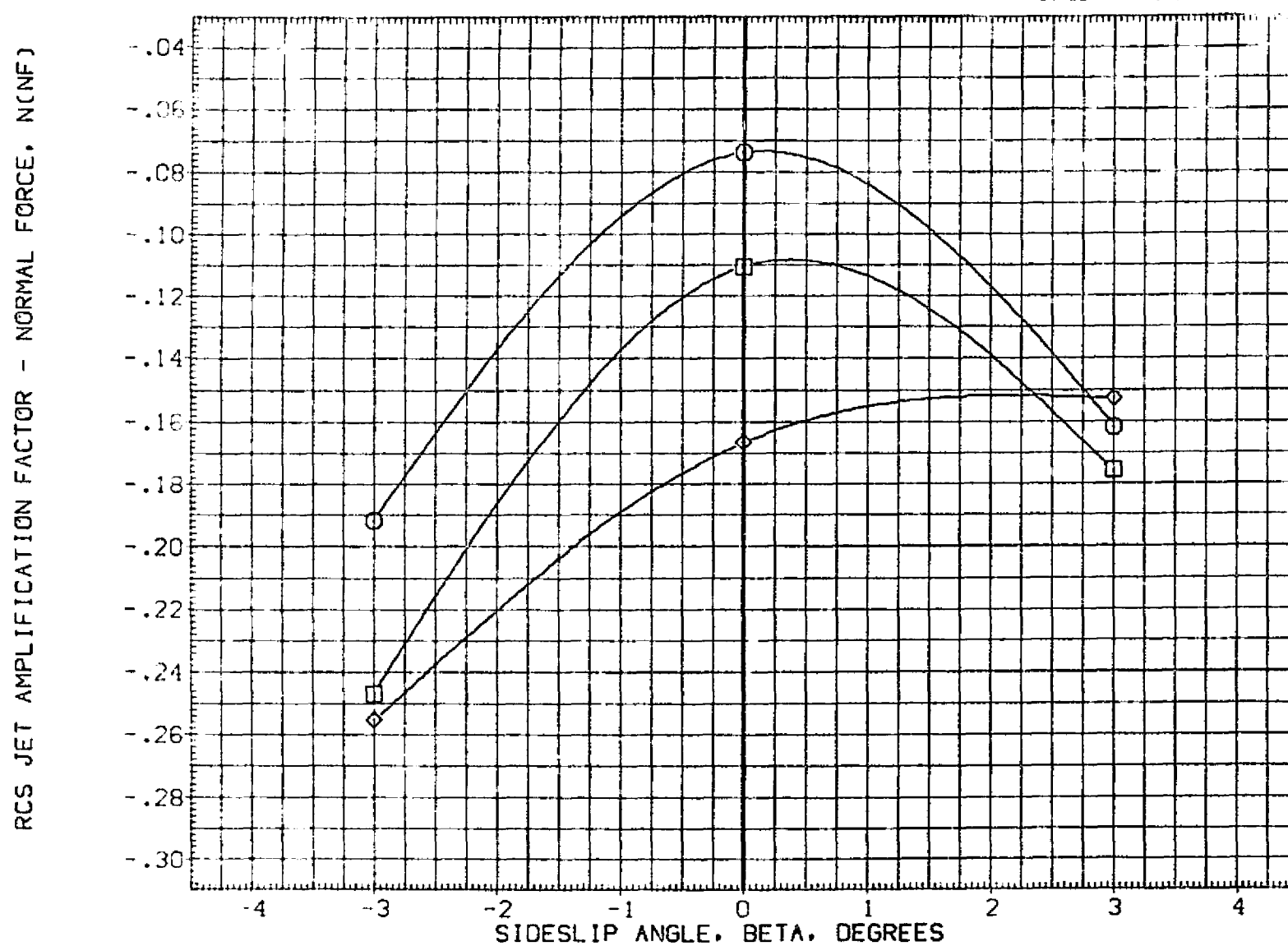


FIGURE 86. AMPLIFICATION FACTOR IN YAW, N52 JETS

01N52

LARC CFHT 118 (MA-22)

(CJA156)

SYMBOL	T/OA-1	PARAMETRIC VALUES
○	47.500	MACH 10.330 ALPHA 20.000
□	95.000	BOFLAP .000 T/OA 95.000
◇	190.000	NO.JET 2.000 ELEVON .000

REFERENCE INFORMATION		
SREF	2690.0000	50.FT.
LREF	474.8000	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - NORMAL FORCE, N(NF)

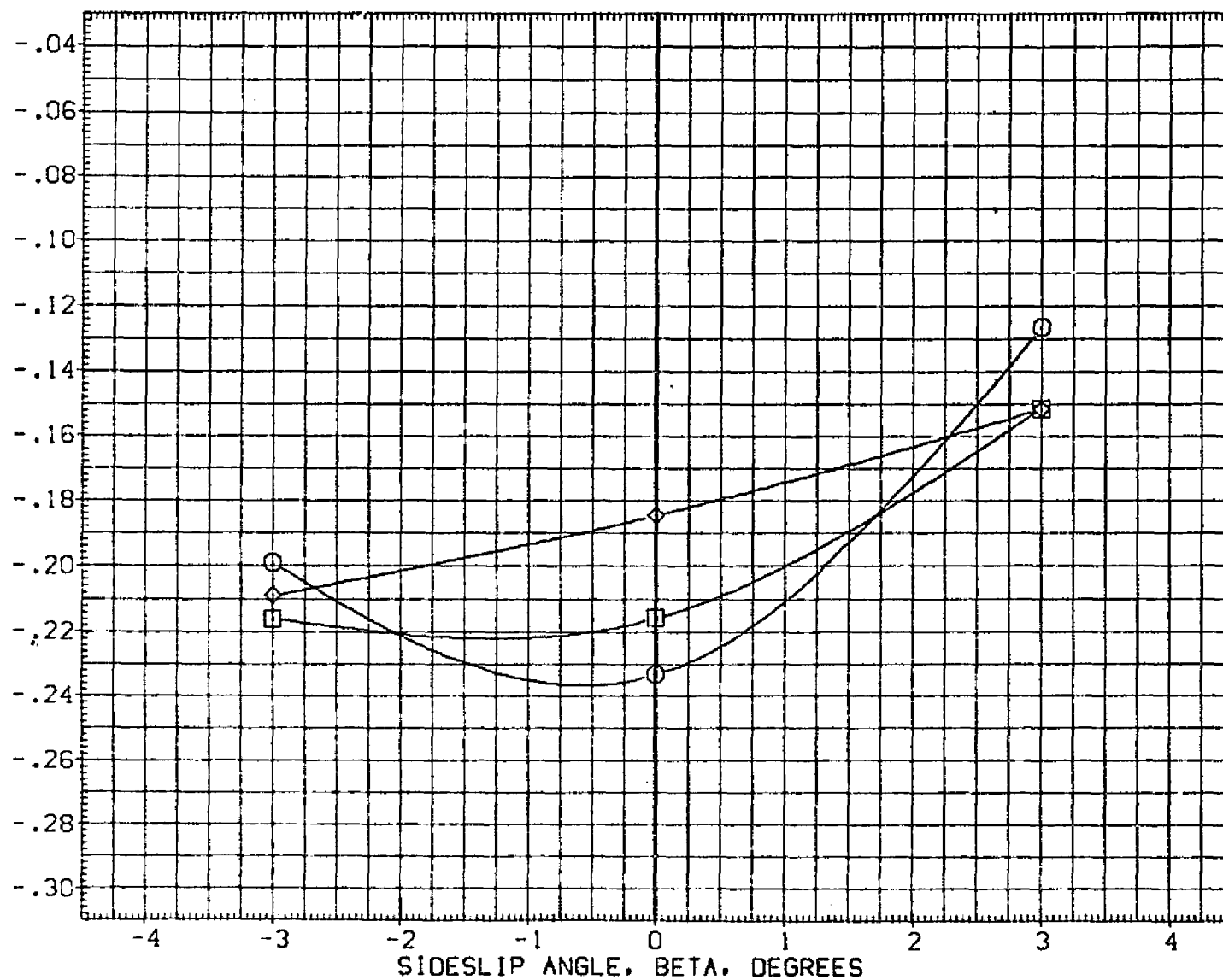


FIGURE 86. AMPLIFICATION FACTOR IN YAW, N52 JETS

SYMBOL	T/OA-1	MACH	PARAMETRIC VALUES	ALPHA	35.000
○	47.500	BDCLAP	.000	T/OA	95.000
□	95.000	NO. J-T	2.000	ELEVON	.000
◇	190.000				

REFERENCE INFORMATION		
SREF	7690.0000	SO. FT.
LREF	474.8000	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. 0
YMRP	.0000	IN. 0
ZMRP	375.0000	IN. 0
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - NORMAL FORCE, N(NF)

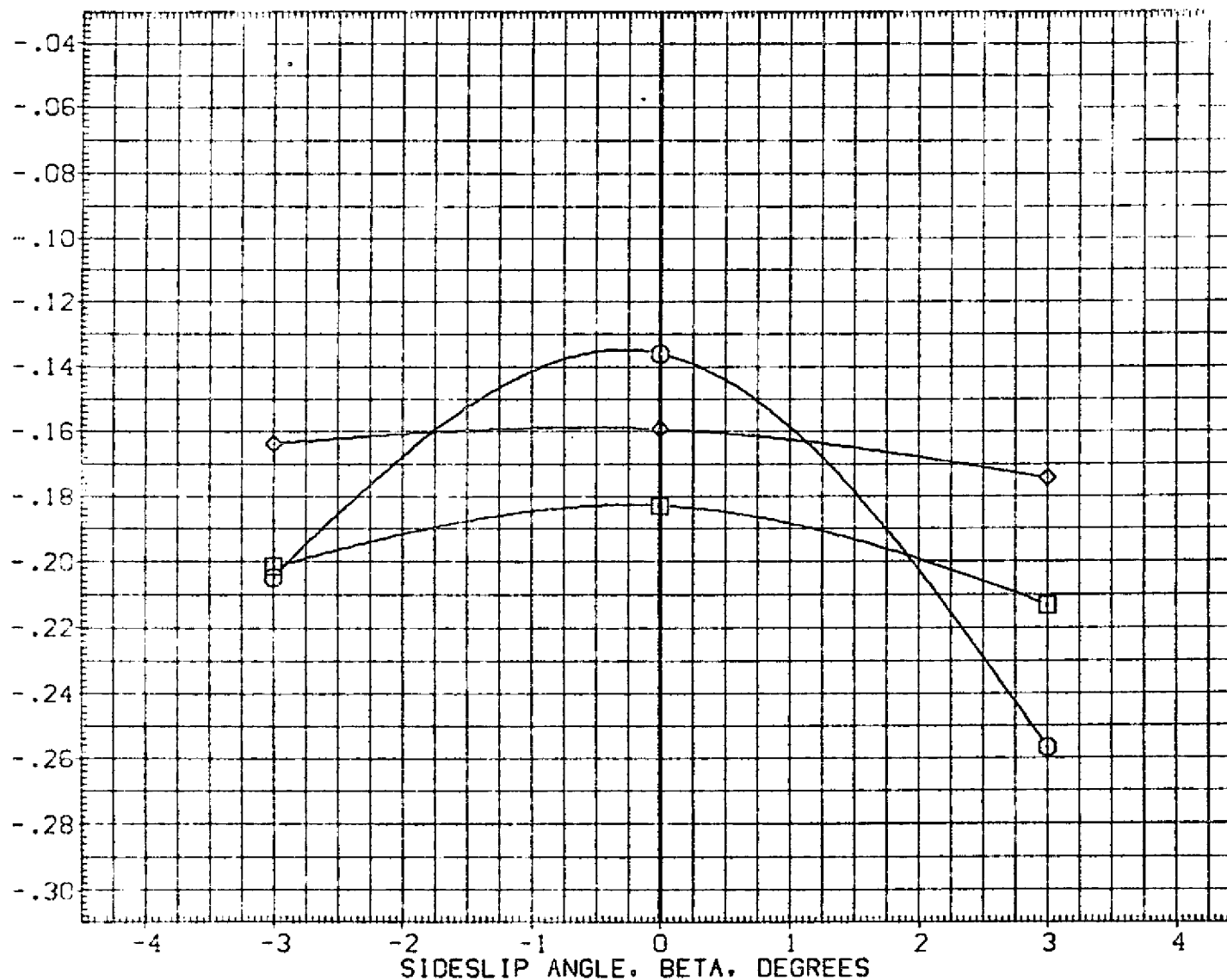


FIGURE 86. AMPLIFICATION FACTOR IN YAW, N52 JETS

01N52

1 ARC CFHT 118 (MA-22)

(CJA156)

SYMBOL

○
□
◇

T/QA-1

47.500

MACH

95.000

BDFLAP

190.000

NO.JET

PARAMETRIC VALUES

10.330

ALPHA

-10.000

T/QA

95.000

ELEVON

.000

REFERENCE INFORMATION

SREF

2690.0000

SQ.FT.

LREF

474.8000

INCHES

BREF

936.6800

INCHES

XMRP

1076.7000

IN. X0

YMRP

.0000

IN. Y0

ZMRP

375.0000

IN. Z0

SCALE

.0100

RCS JET AMPLIFICATION FACTOR - AXIAL FORCE, N(AF)

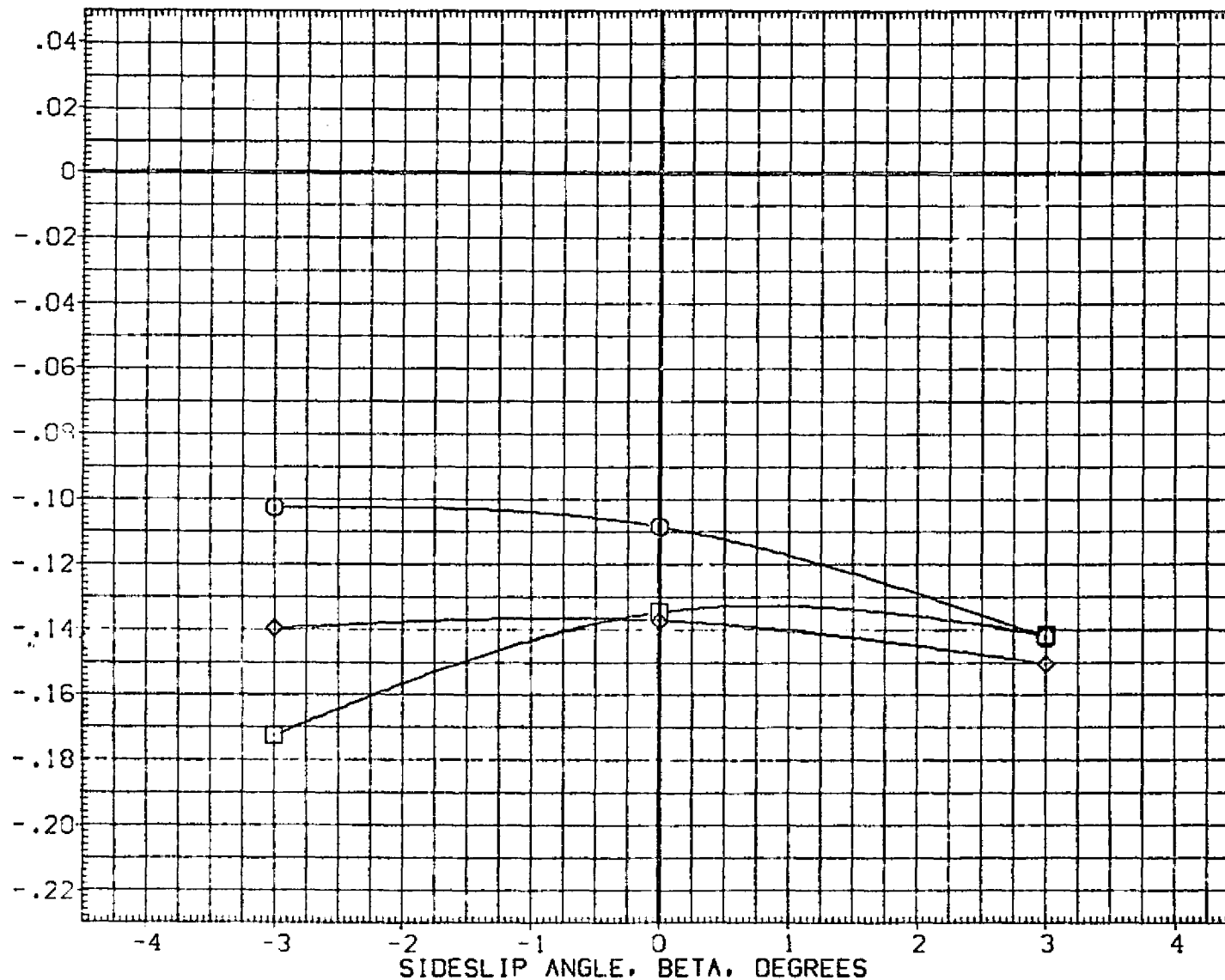


FIGURE 86. AMPLIFICATION FACTOR IN YAW, N52 JETS

SYMBOL	T/QA-1	PARAMETRIC VALUES			
○	47.500	MACH	10.330	ALPHA	.000
□	95.000	BDFLAP	.000	T/QA	95.000
◇	190.000	NO.JET	2.000	ELEVON	.000

REFERENCE INFORMATION		
SREF	2690.0000	10. F
LREF	474.8000	10. F
BREF	936.6800	10. F
XPRP	1075.7000	10. F
YPRP	.0000	10. F
ZPRP	375.0000	10. F
SCALE	.0100	10. F

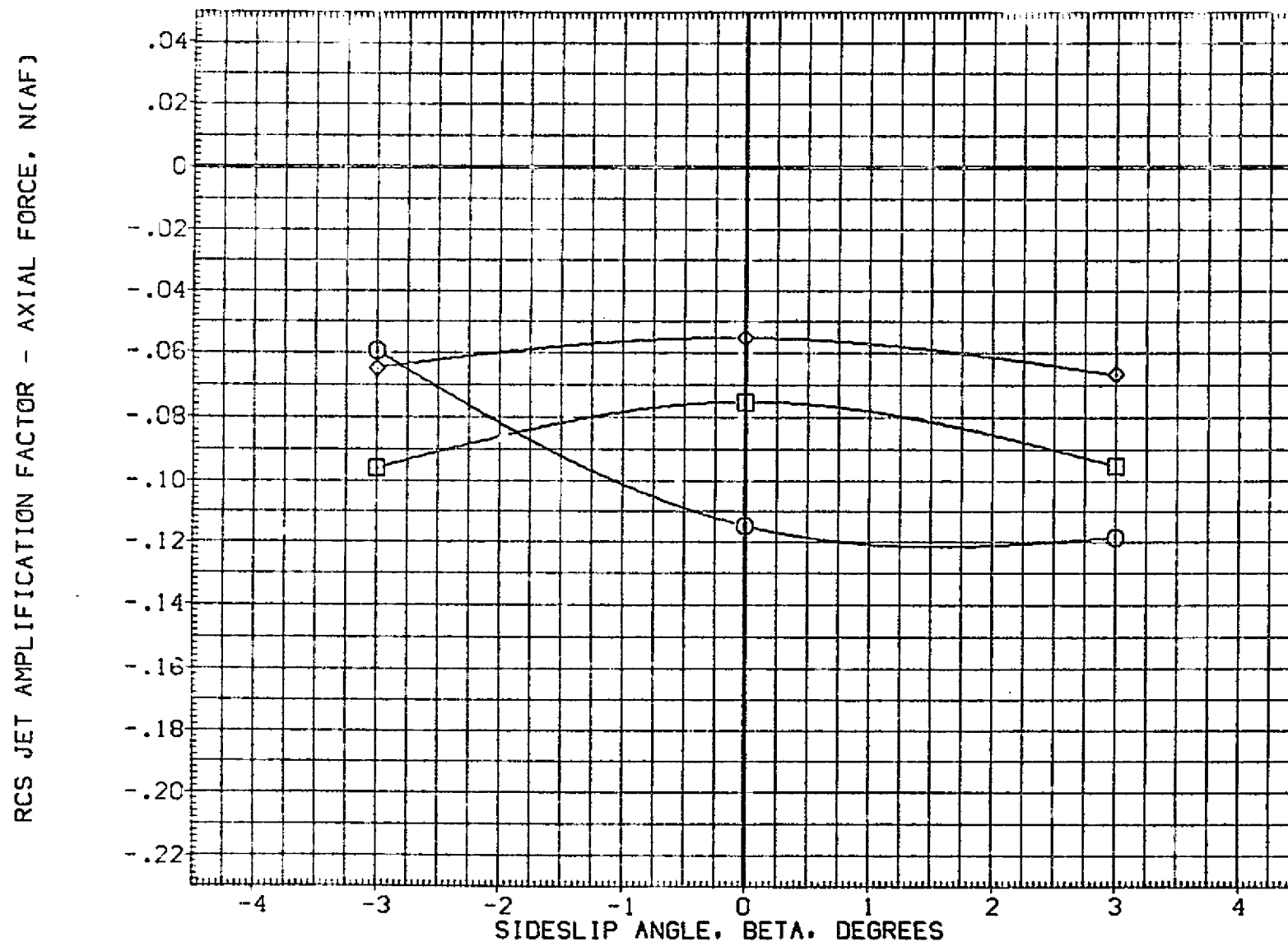


FIGURE 86. AMPLIFICATION FACTOR IN YAW, N52 JETS

01N52

LARC CFHT 118 (MA-22)

(CJA156)

SYMBOL

T/QA-1

PARAMETRIC VALUES

○
□
◇

47.500
95.000
190.000

MACH
BD FLAP
NO JET

10.330
.000
2.000

ALPHA
T/QA
ELEVON

10.000
95.000
.000

REFERENCE INFORMATION

SREF	2690.0000	50.FT.
LREF	474.8000	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - AXIAL FORCE, N(AF)

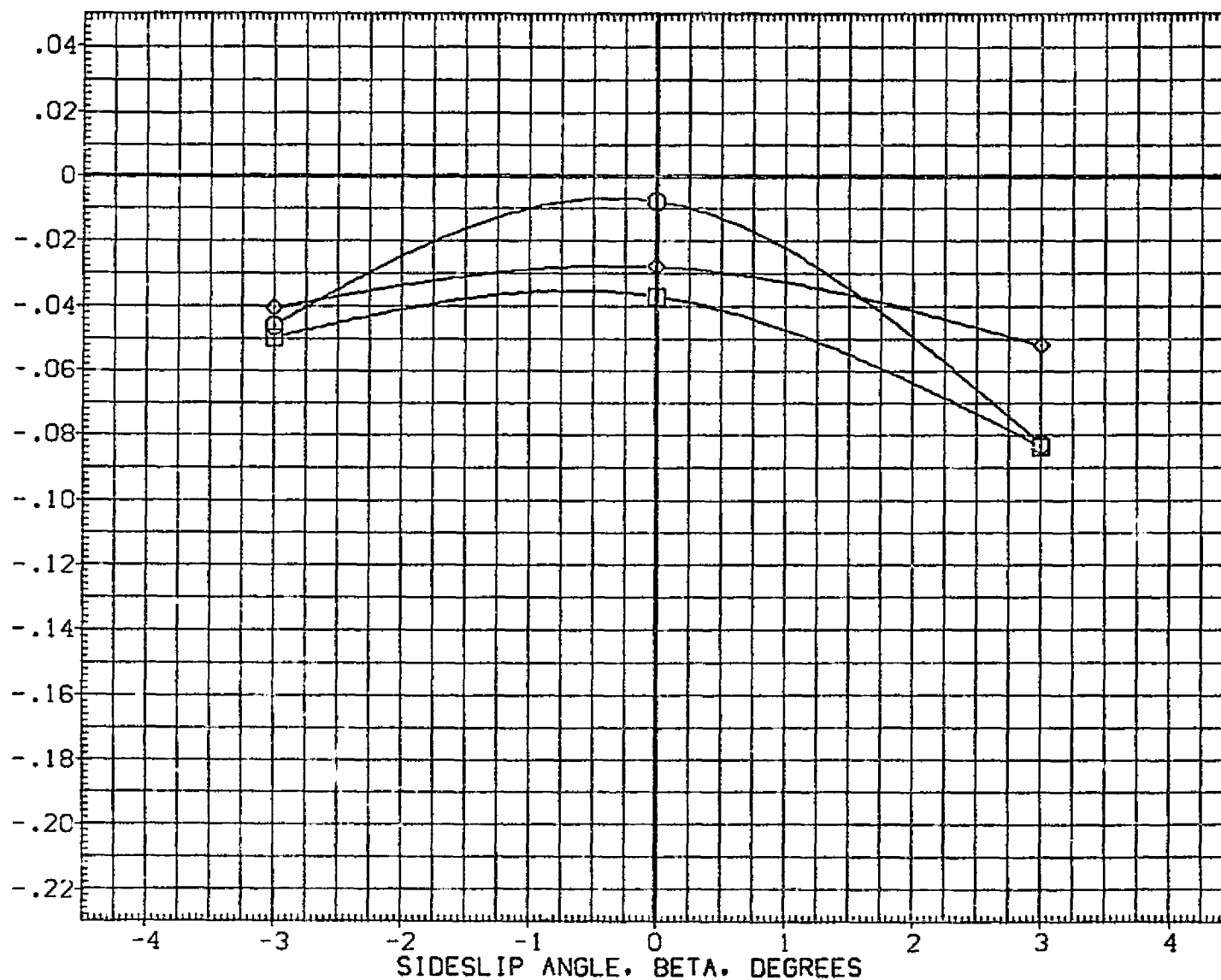


FIGURE 86. AMPLIFICATION FACTOR IN YAW, N52 JETS

SYMBOL

T/QA-1

PARAMETRIC VALUES

○
□
◇47.500
95.000
190.000MACH
BOFLAP
NO JET10.330
.000
2.000ALPHA
T/QA
ELEVON20.000
95.000
.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8000	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - AXIAL FORCE, NCAF

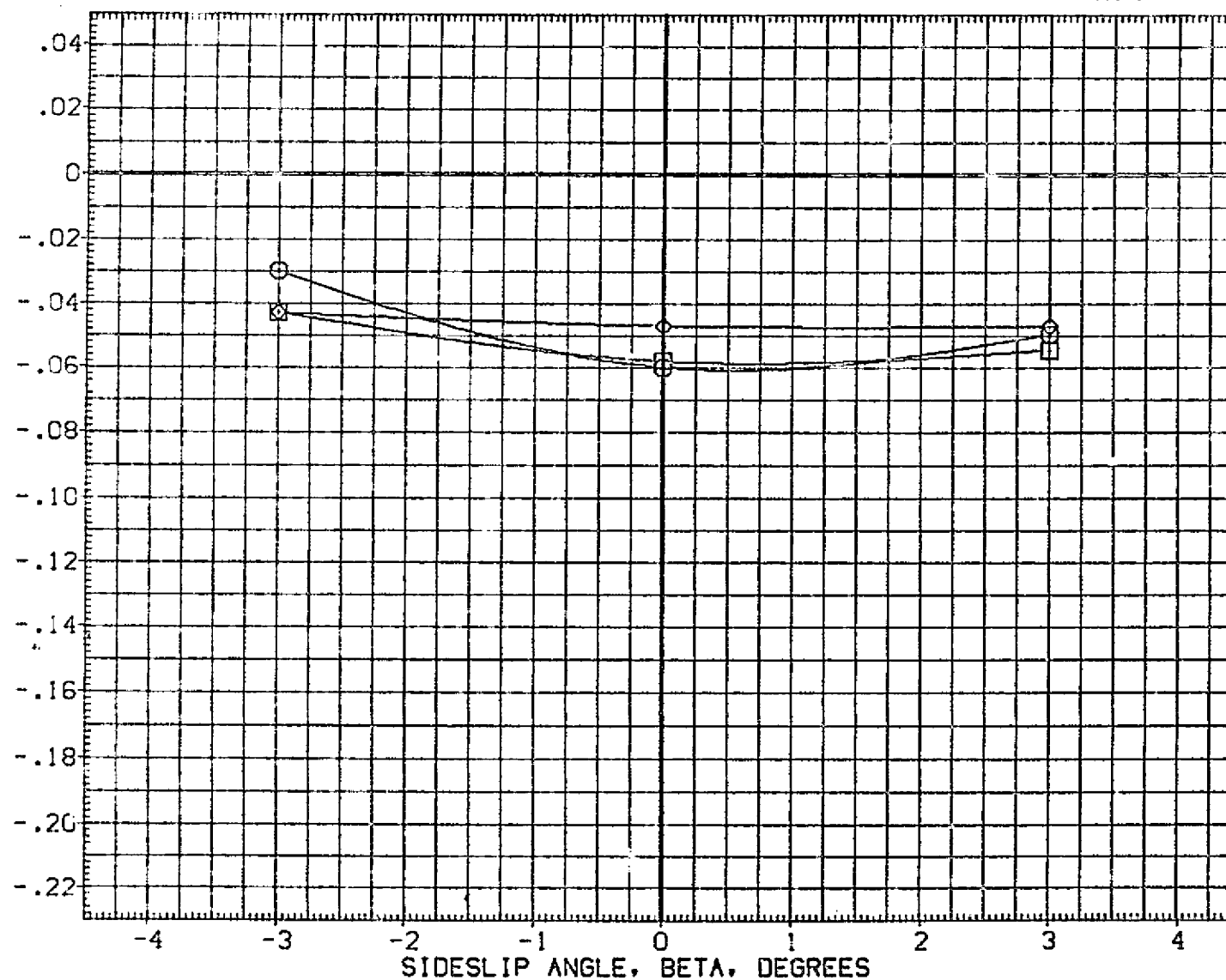


FIGURE 86. AMPLIFICATION FACTOR IN YAW, N52 JETS

01N52

LARC CFHT 118 (MA-22)

(CJA156)

SYMBOL	T/QA-1	PARAMETRIC VALUES
○	47.500	MACH 10.330 ALPHA 35.000
□	95.000	BDFLAP .000 T/QA 95.000
◇	190.000	NO. JET 2.000 ELEVON .000

REFERENCE INFORMATION		
SREF	26.00000	50. FT.
LREF	474.8000	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - AXIAL FORCE, N(AF)

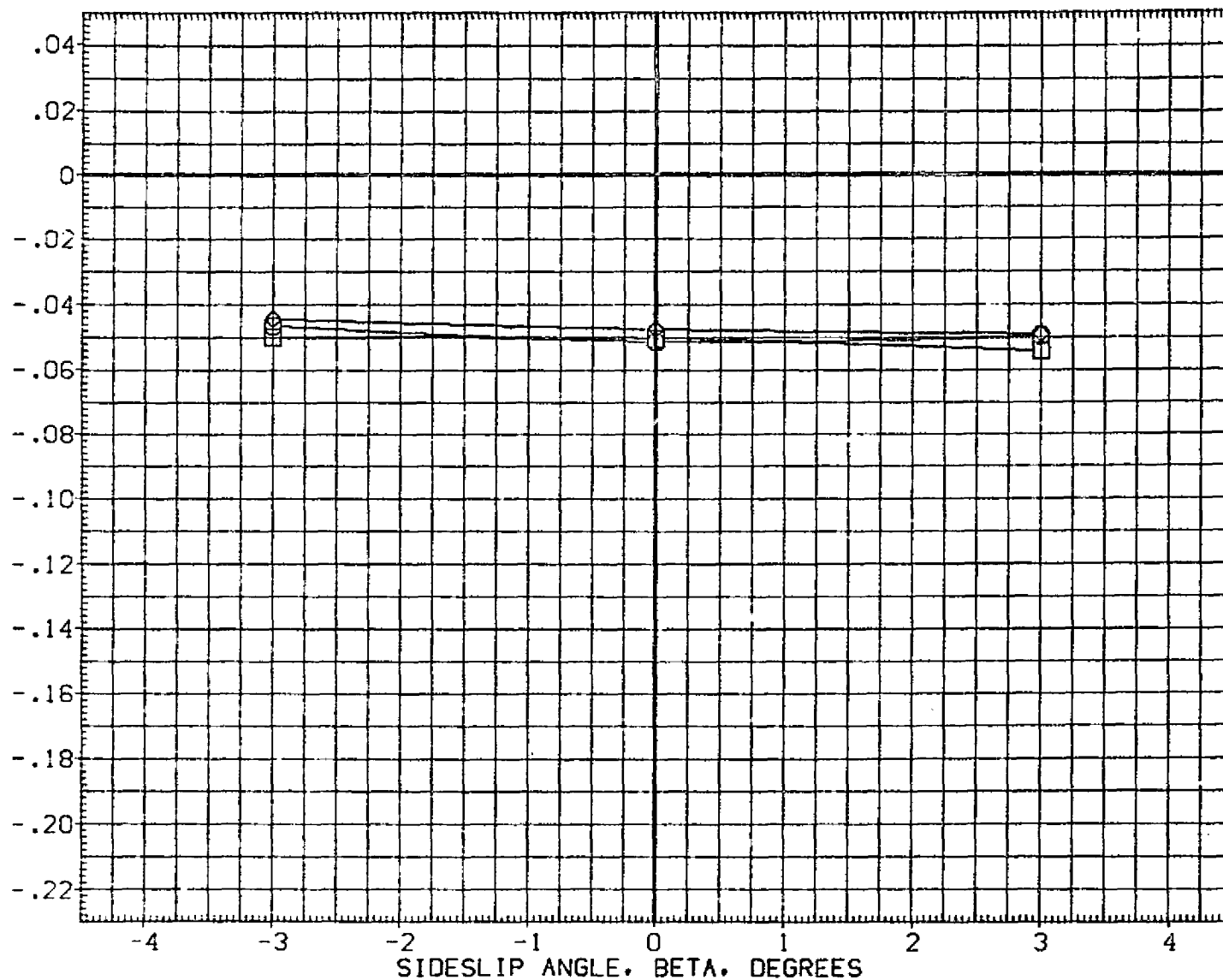


FIGURE 86. AMPLIFICATION FACTOR IN YAW, N52 JETS

SYMBOL	T/OA-1	PARAMETRIC VALUES
○	47.500	MACH 10.330 ALPHA -10.000
□	95.000	BDFLAP .000 T/OA 95.000
◇	190.000	NO JET 2.000 ELEVON .000

REFERENCE INFORMATION		
SREF	2590.0000	SO.FT.
LREF	474.8000	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0100	

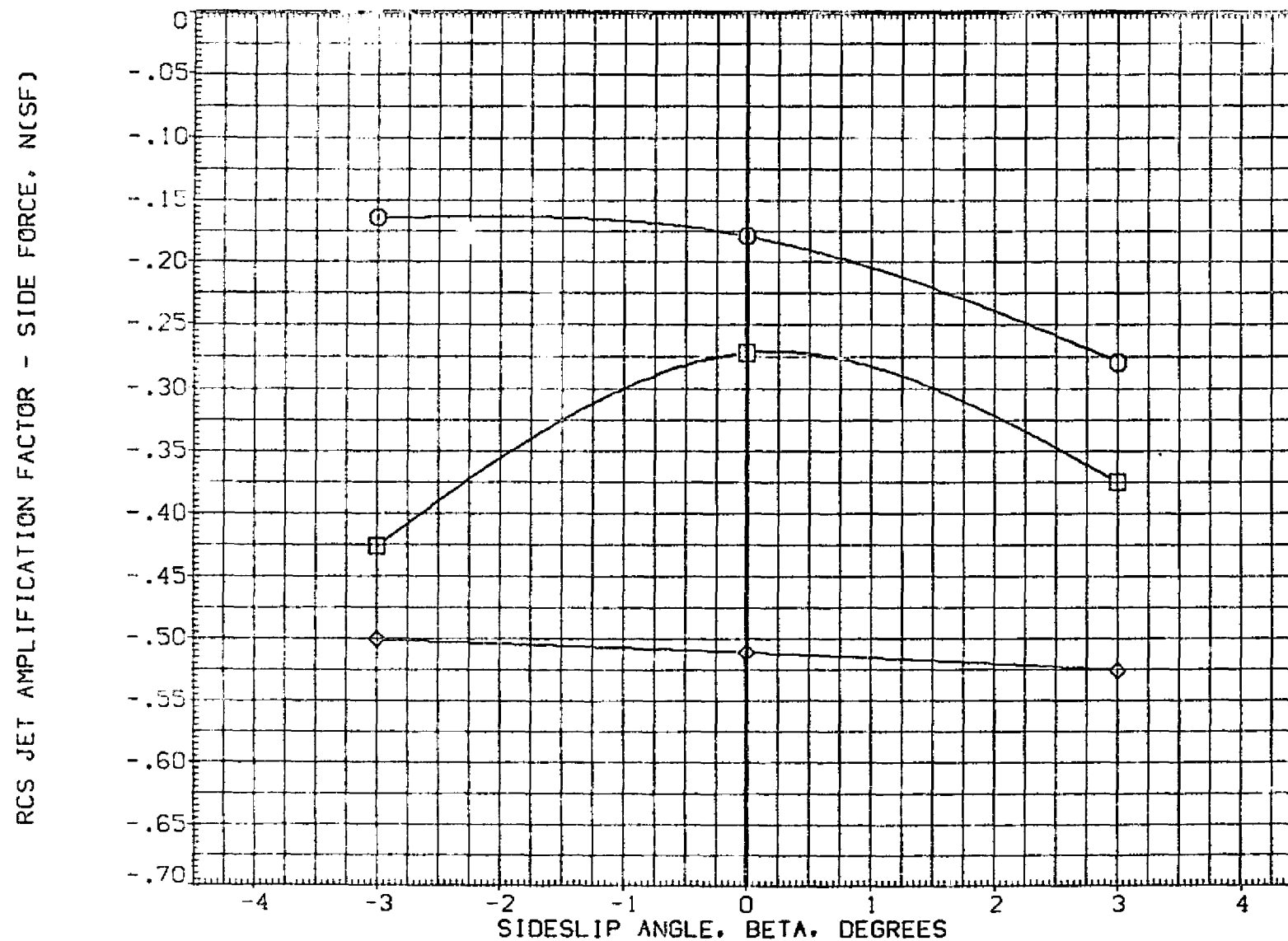


FIGURE 86. AMPLIFICATION FACTOR IN YAW, N52 JETS

01N52

LARC CFHT 118 (MA-22)

(CJA156)

SYMBOL	T/QA-1	MACH	PARAMETRIC VALUES	ALPHA	T/QA	ELEVON
○	47.500	10.330	.000	.000		
□	95.000	.000	95.000			
◇	190.000	NO JET	2.000	.000		

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8000	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - SIDE FORCE, N(SF)

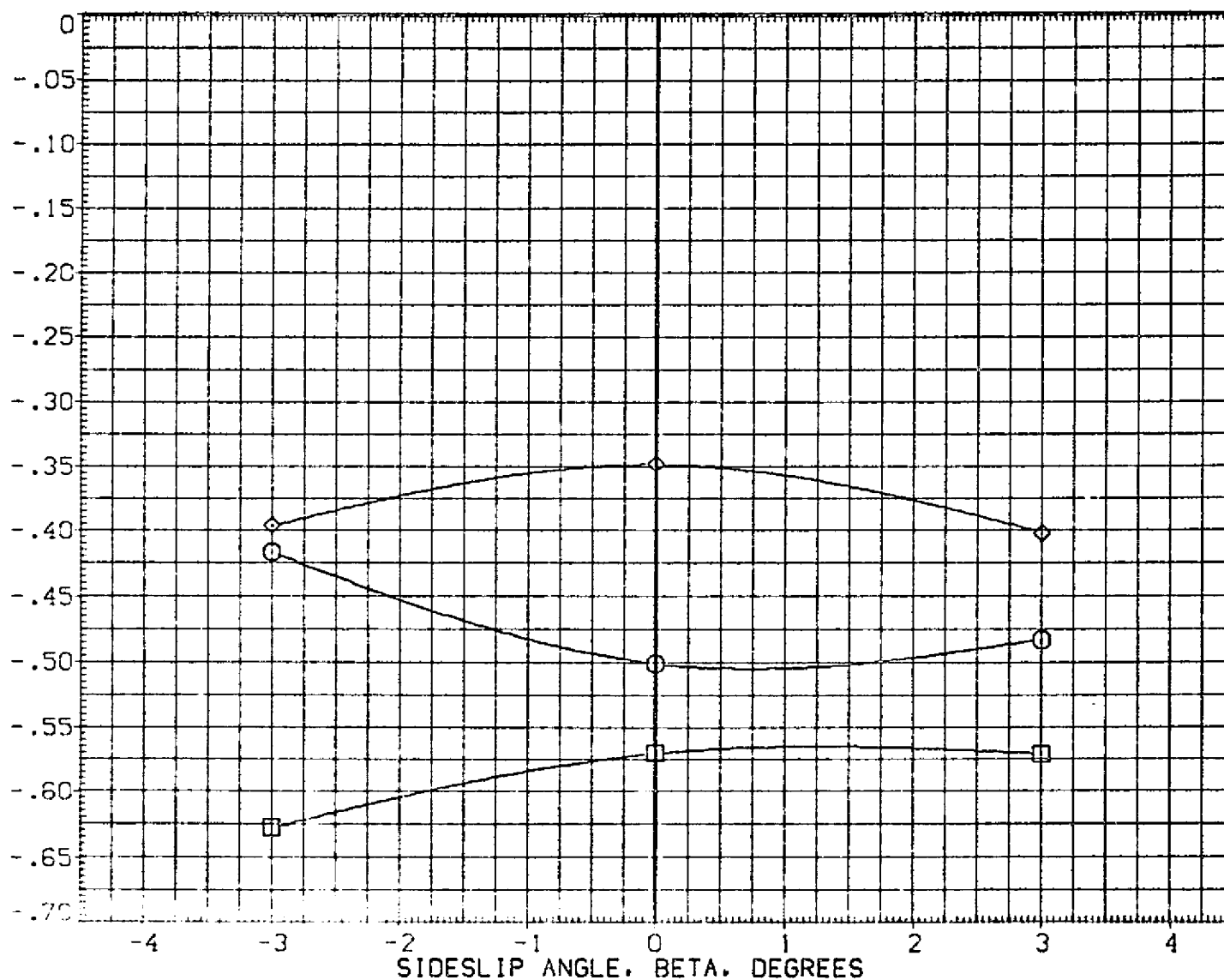


FIGURE 86. AMPLIFICATION FACTOR IN YAW, N52 JETS

SYMBOL	T/OA-1	PARAMETRIC VALUES
○	47.500	MACH 10.330 ALPHA 10.000
□	95.000	BOFLAP .000 T/OA 95.000
◇	190.000	NOJET 2.000 ELEVON .000

REFERENCE INFORMATION	
SREF	2690.0000 50 FT.
LREF	474.8000 100 LBS
BREF	936.6800 INCHES
XMRP	1076.7000 IN. X0
YMRP	.0000 IN. Y0
ZMRP	375.0000 IN. Z0
SCALE	.0100

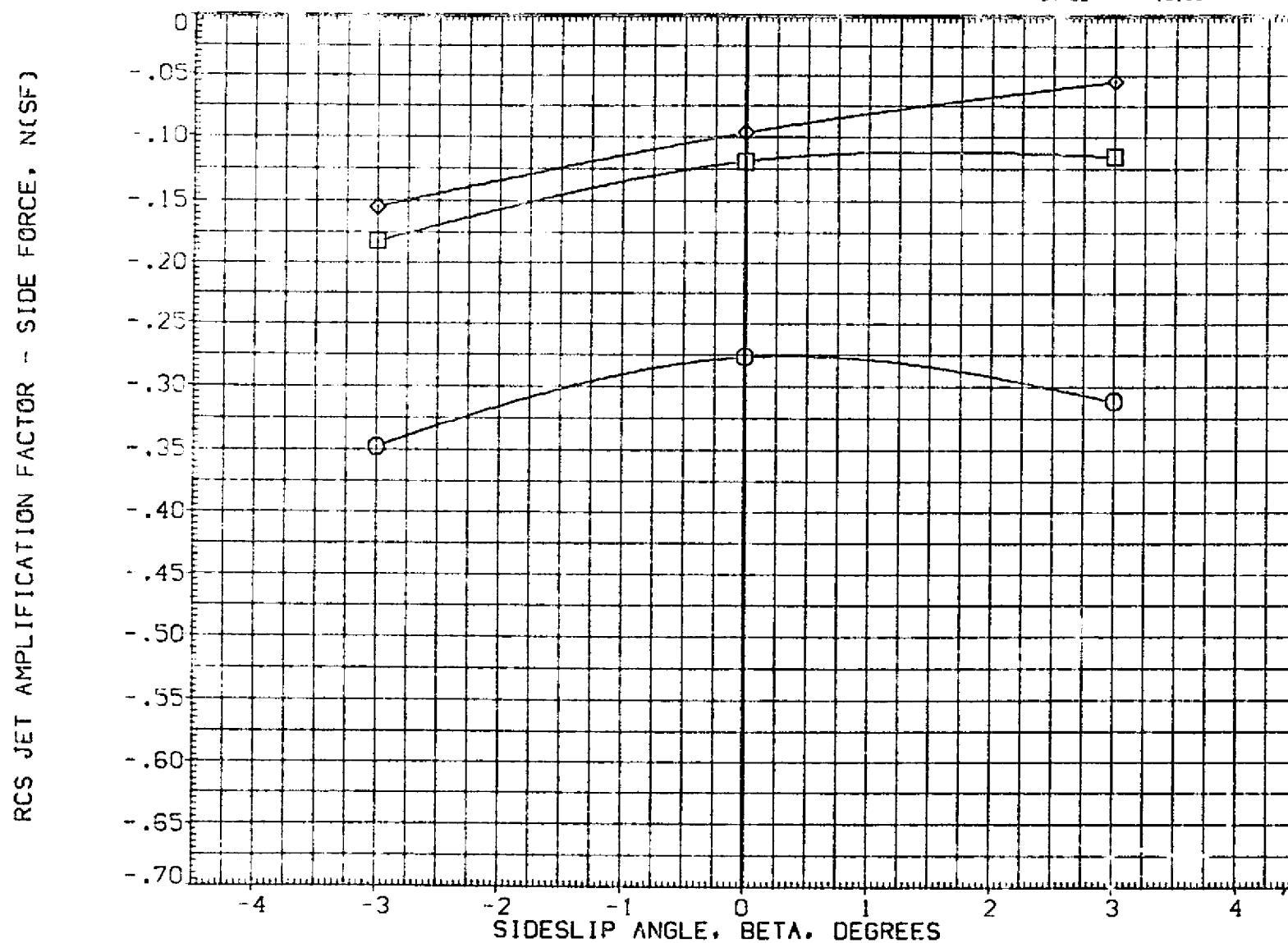


FIGURE 86. AMPLIFICATION FACTOR IN YAW, N52 JETS

01N52

LARC CFHT 118 (MA-22)

(CJA156)

SYMBOL	T/OA-1	MACH	PARAMETRIC VALUES	ALPHA	20.000
○	47.500	BDFLAP	.000	T/OA	95.000
□	95.000	NO JET	2.000	ELEVON	.000

REFERENCE INFORMATION		
SREF	2690.0000	SD, FT.
LREF	474.8000	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - SIDE FORCE, N(SF)

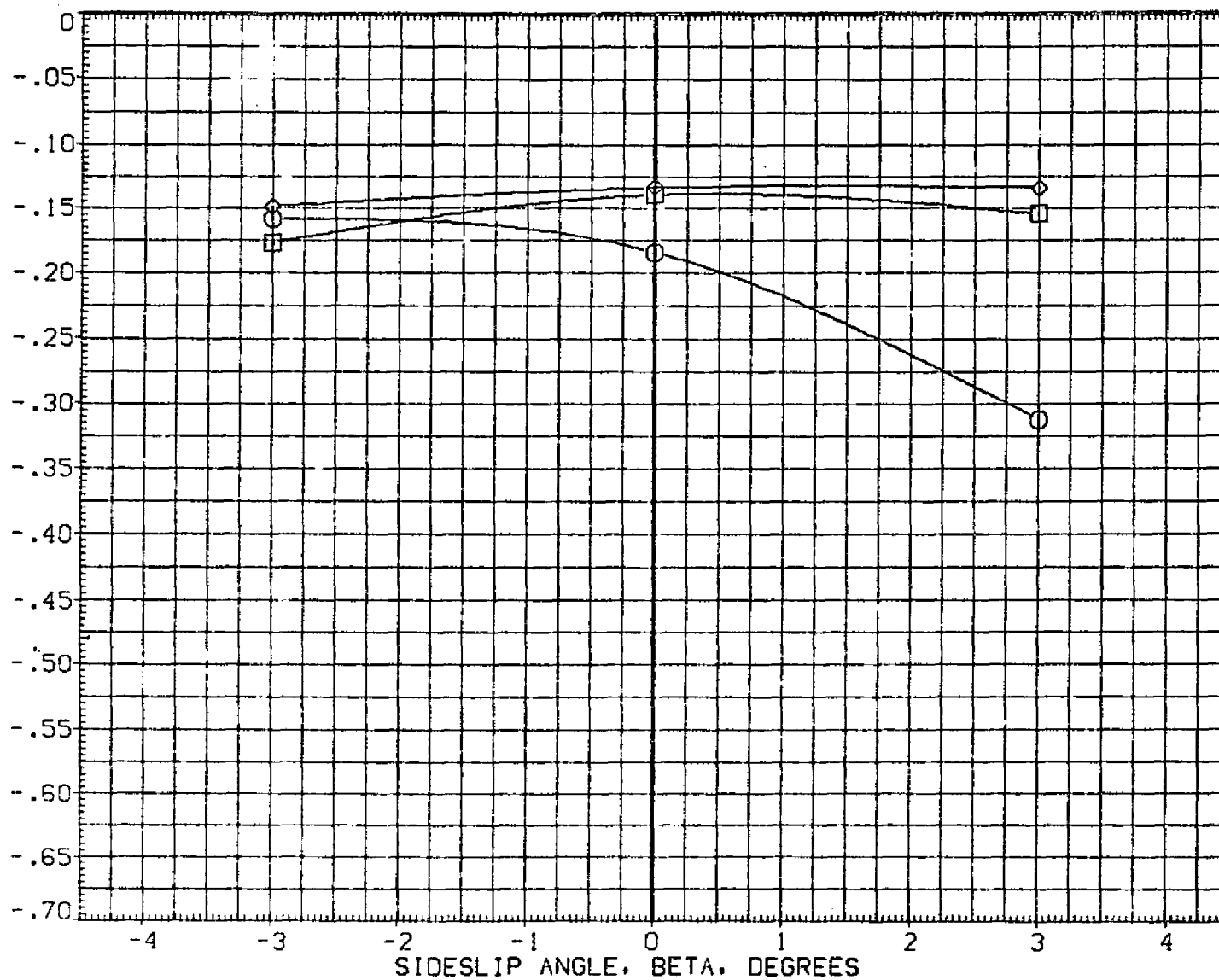


FIGURE 86. AMPLIFICATION FACTOR IN YAW, N52 JETS

SYMBOL	T/QA-1	MACH	PARAMETRIC VALUES	ALPHA	35.000
○	47.500	BDFLAP	.000	T/QA	95.000
□	95.000	NO JET	2.000	ELEVON	.000
◇	190.000				

REFERENCE INFORMATION		
SREF	2690.0000	30. FT.
LREF	174.8000	INCHES
BREF	936.6800	INCHES
YRP	1076.7000	IN. 10
ZRP	.0000	IN. 10
ZRP	375.0000	IN. 20
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - SIDE FORCE, N(SF)

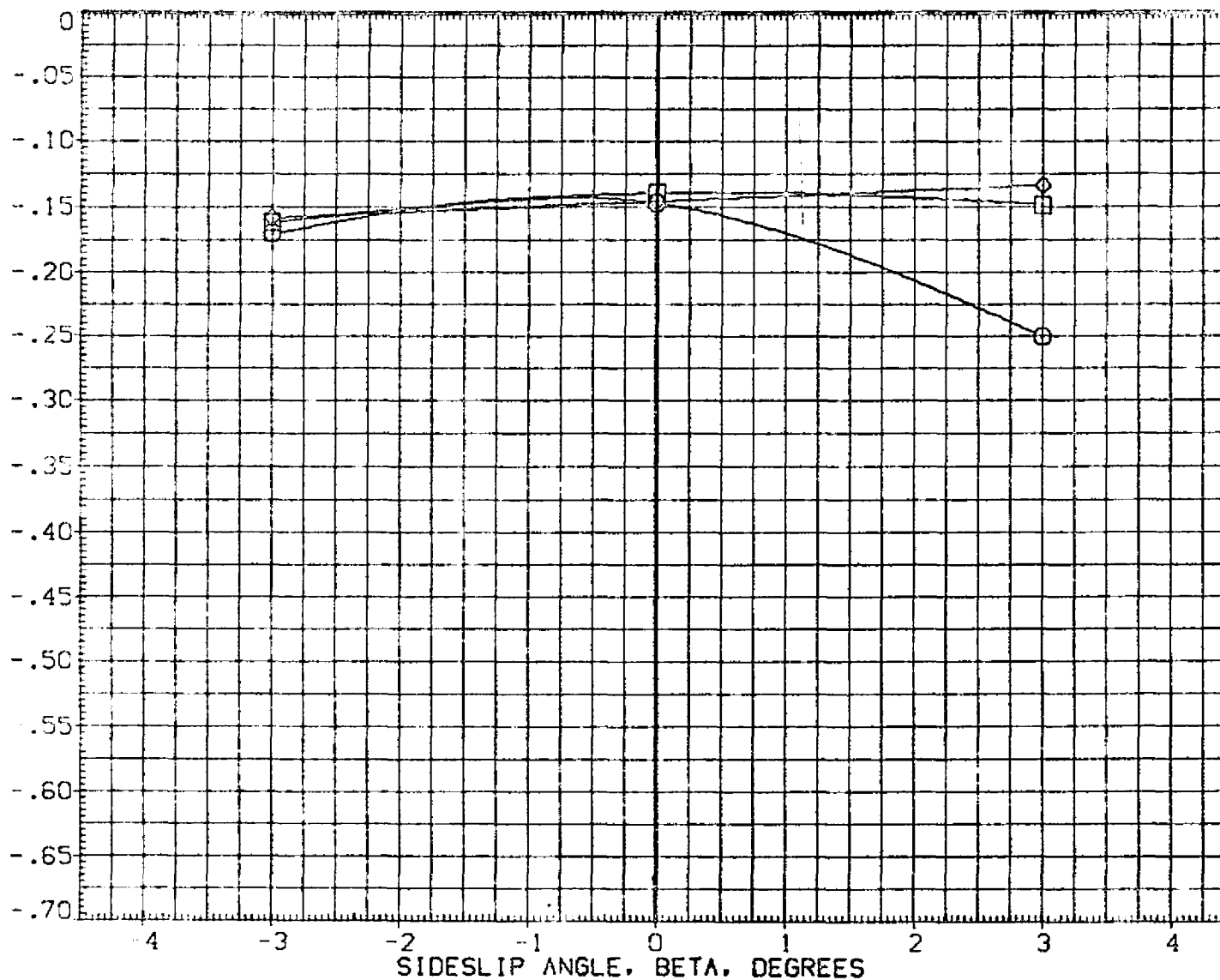


FIGURE 86. AMPLIFICATION FACTOR IN YAW, N52 JETS

01N82

LARC CFHT 118 (MA-22)

(CJA1811)

SYMBOL

T/QA-1

PARAMETRIC VALUES

○

47.500

MACH

10.330

ALPHA

-10.000

□

95.000

BD FLAP

.000

T/QA

142.500

◇

190.000

NO. JET

3.000

ELEVON

.000

REFERENCE INFORMATION

SREF 2690.0000

SQ. FT.

LREF 474.6000

INCHES

BREF 936.6800

INCHES

XMRP 1076.7000

IN. X0

YMRP .0000

IN. Y0

ZMRP 375.0000

IN. Z0

SCALE .0100

RCS JET AMPLIFICATION FACTOR - PITCH, N(PM)

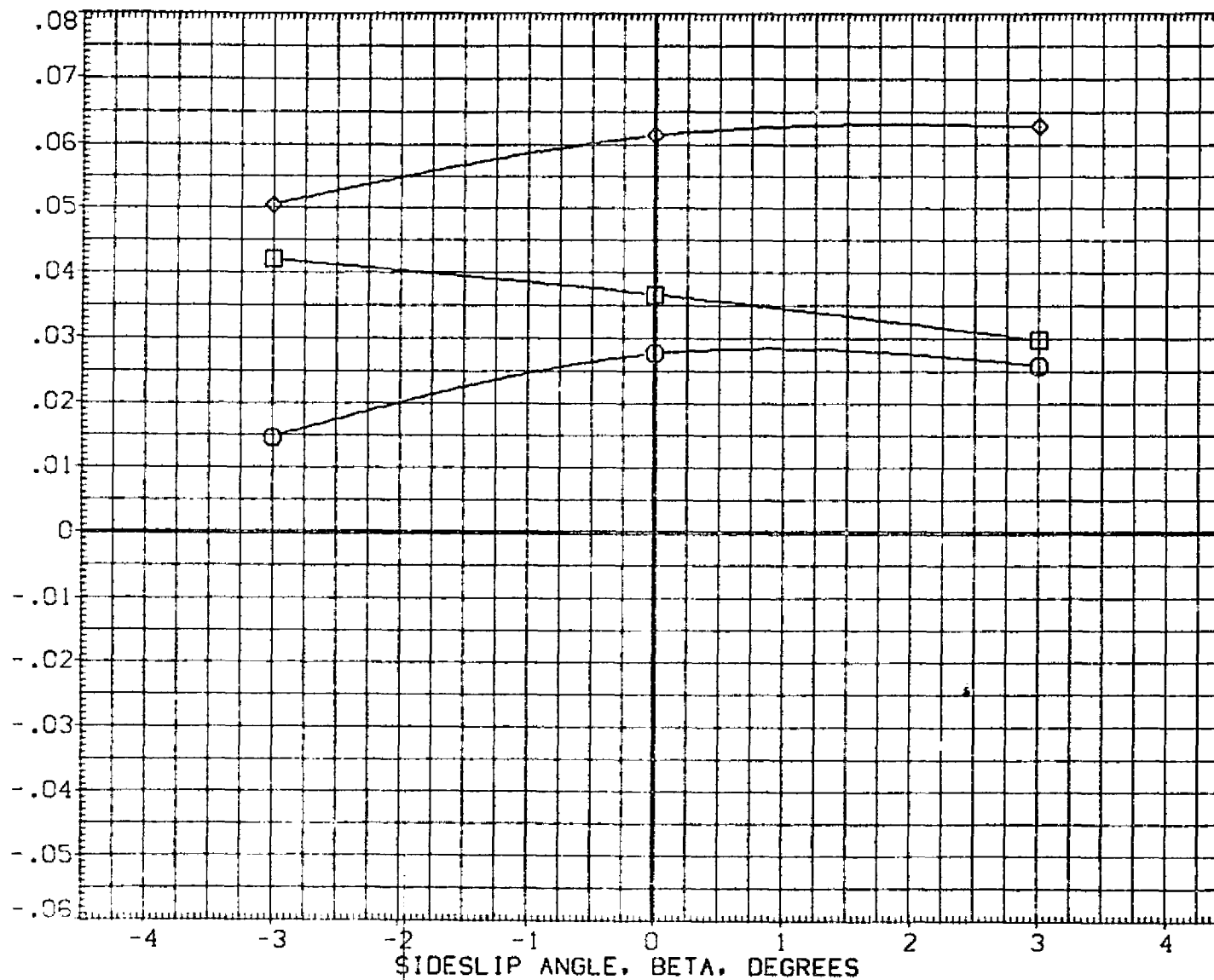


FIGURE 87. AMPLIFICATION FACTOR IN YAW, N82 JETS

SYMBOL



T/OA-1

47.500

MACH

BDFLAP

NOJET

PARAMETRIC VALUES

10.330

ALPHA

T/OA

ELEVON

.000

142.500

.000

REFERENCE INFORMATION

SREF 2630.0000

LREF 474.8000

BREF 936.6800

XMRP 1076.7000

YMRP .0000

ZMRP 375.0000

SCALE .0100

30. FT.

INCHES

INCHES

IN. X0

IN. Y0

IN. Z0

RCS JET AMPLIFICATION FACTOR - PITCH, N(PM)

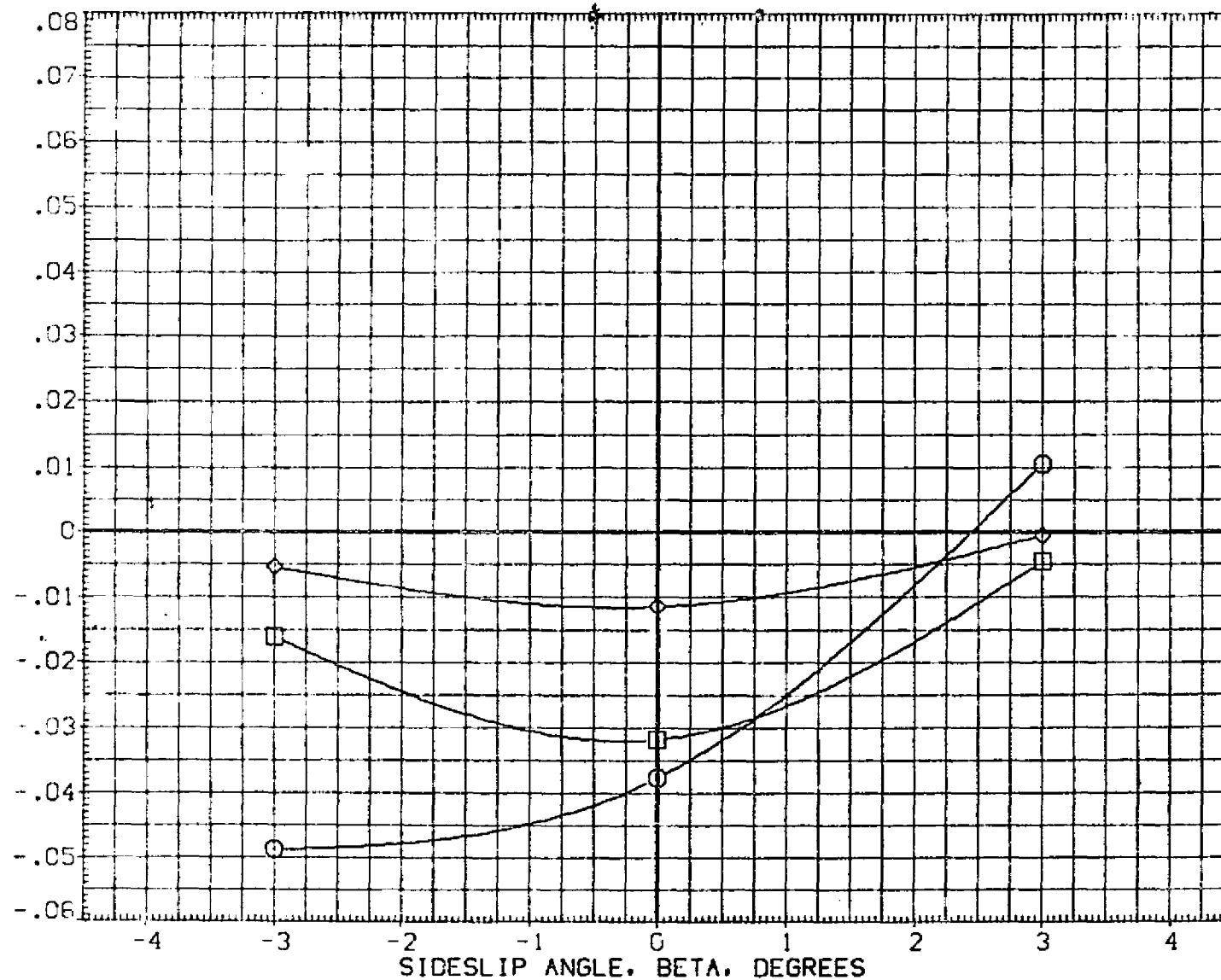


FIGURE 87. AMPLIFICATION FACTOR IN YAW, N82 JETS

01N92

LARC CFHT 119 (MA-22)

(CJA191)

SYMBOL

○
□
◇

T/QA-1

MACH

PARAMETRIC VALUES

10.330

ALPHA

10.000

BDFLAP

.000

T/QA

142.500

NO.JET

3.000

ELEVON

.000

REFERENCE INFORMATION

SREF

2690.0000

SQ.FT.

LREF

474.8000

INCHES

BREF

936.6800

INCHES

XMRP

1076.7000

IN. XO

YMRP

.0000

IN. YO

ZMRP

375.0000

IN. ZO

SCALE

.0100

RCS JET AMPLIFICATION FACTOR - PITCH, N(PM)

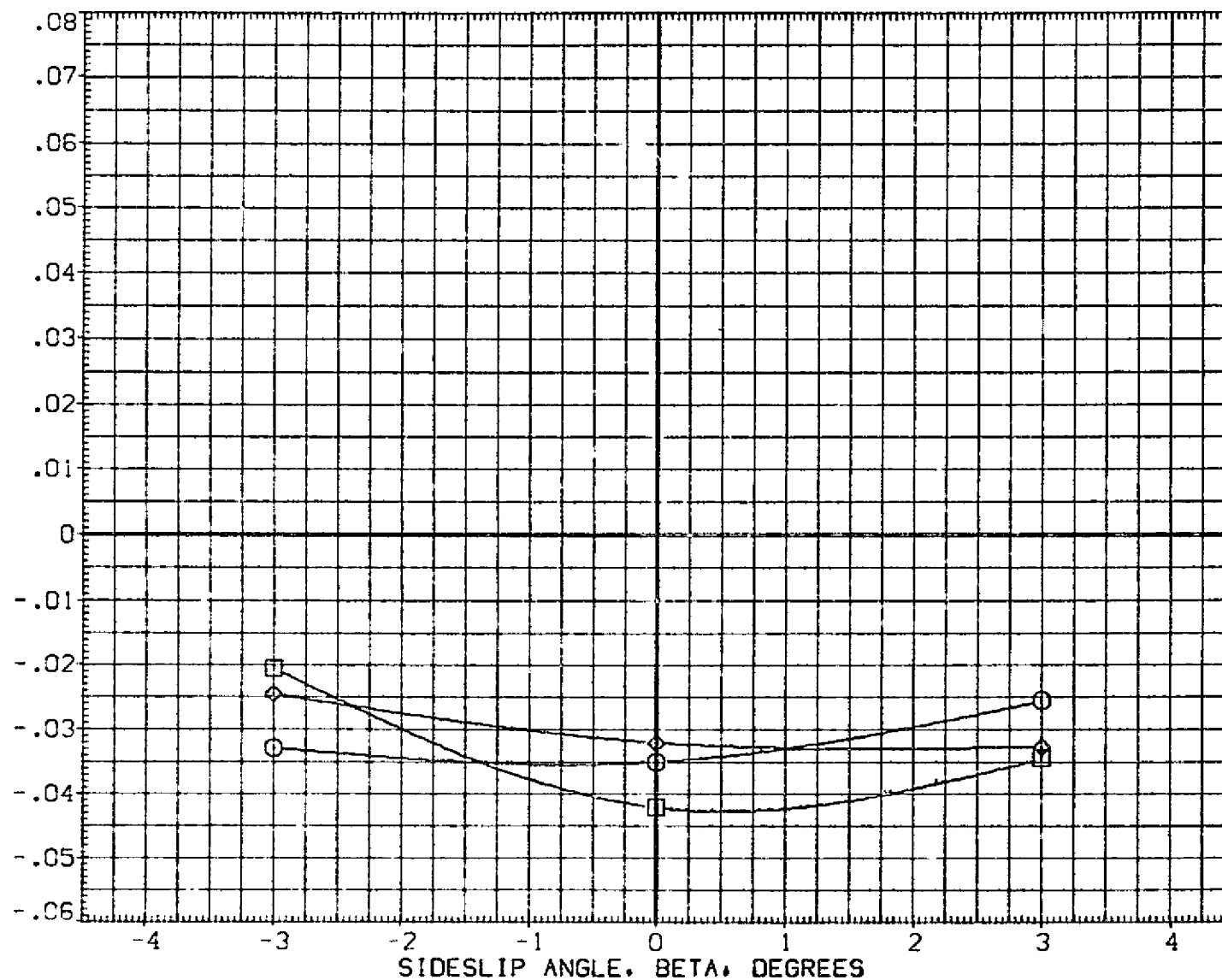


FIGURE 87. AMPLIFICATION FACTOR IN YAW, N82 JETS

SYMBOL	T/QA-1	MACH	PARAMETRIC VALUES		
○	47.500		10.330	ALPHA	20.000
□	95.000	BDFLAP	.000	T/QA	142.500
◇	190.000	NO JET	3.000	ELEVON	.000

REFERENCE INFORMATION		
SREF	2690.0000	50. FT.
LREF	474.8000	INCHES
BREF	936.6800	INCHES
XMRP	1075.7000	IN. 10
YMRP	.0000	IN. 10
ZMRP	375.0000	IN. 20
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - PITCH, N(PM)

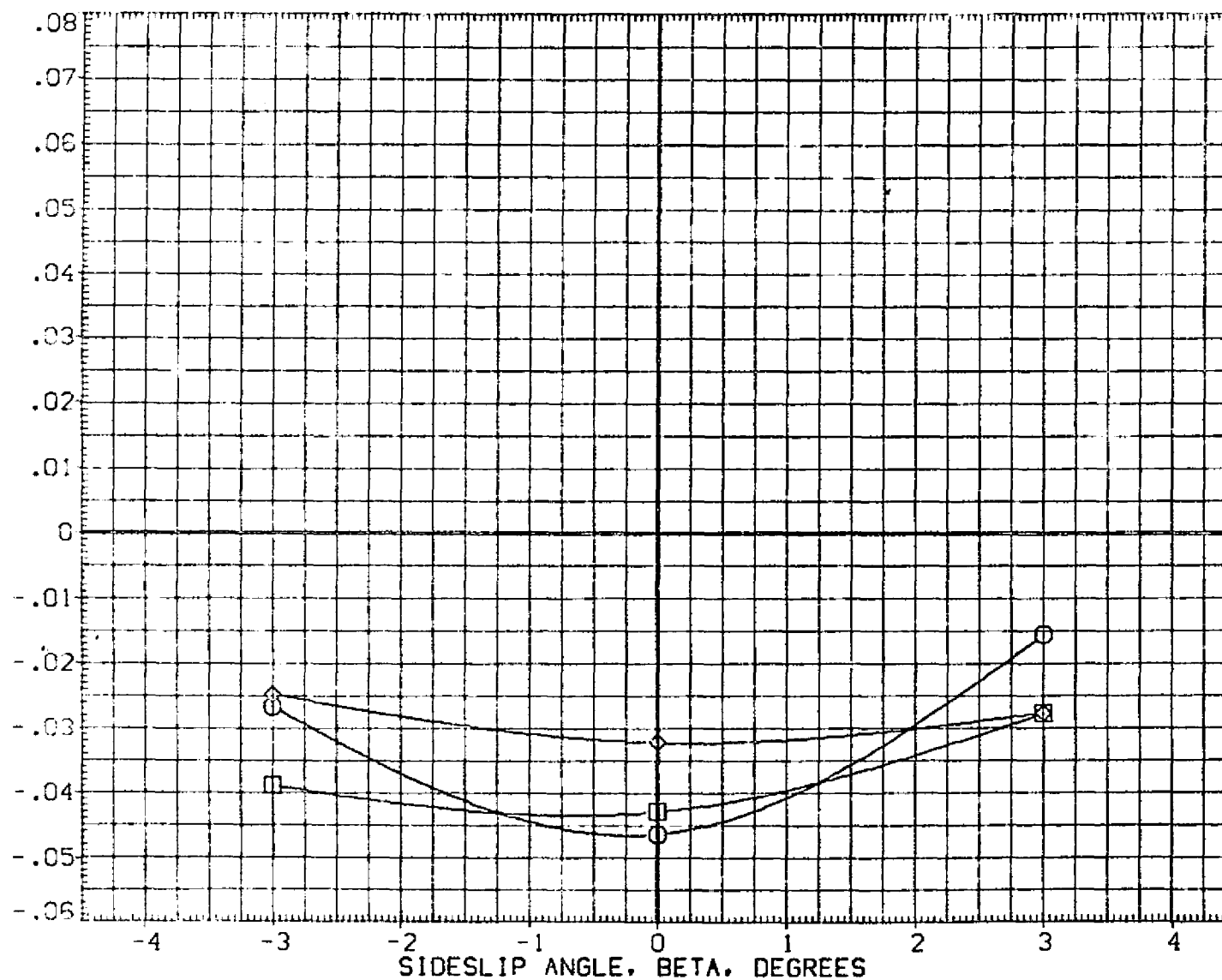


FIGURE 87. AMPLIFICATION FACTOR IN YAW, N82 JETS

01N82

LARC CFHT 118 (MA-22)

(CJA181)

SYMBOL

T/QA-1

PARAMETRIC VALUES

○

47.500

MACH

10.330

ALPHA

35.000

□

95.000

BDFLAP

.000

T/QA

142.500

◇

190.000

NO.JET

3.000

ELEVON

.000

REFERENCE INFORMATION

SREF

2690.0000

50.FT.

LREF

474.8000

INCHES

BREF

936.6800

INCHES

XMRP

1076.7000

IN. X0

YMRP

.0000

IN. Y0

ZMRP

375.0000

IN. Z0

SCALE

.0100

RCS JET AMPLIFICATION FACTOR - PITCH, N(PM)

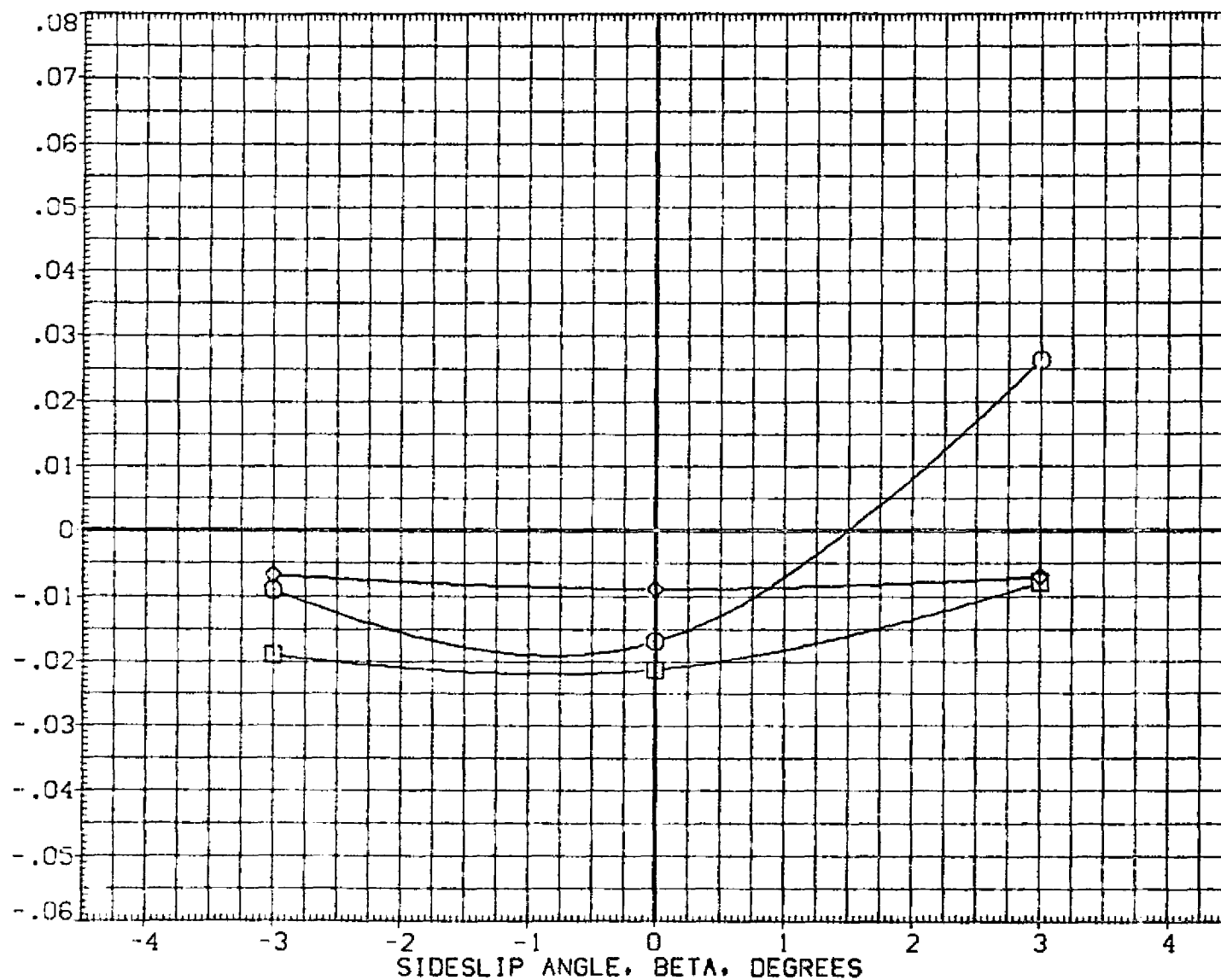


FIGURE 87. AMPLIFICATION FACTOR IN YAW, N82 JETS

SYMBOL



T/QA-1

47.500

MACH

PARAMETRIC VALUES

10.330

ALPHA

-10.000

BDFLAP

.000

T/QA

142.500

NO. JET

3.000

ELEVON

.000

REFERENCE INFORMATION

SREF

2690.0000

SQ. FT.

LREF

47.8000

INCHES

BREF

936.6800

INCHES

XMRP

1076.7000

IN. X0

YMRP

.0000

IN. Y0

ZMRP

375.0000

IN. Z0

SCALE

.0100

RCS JET AMPLIFICATION FACTOR - ROLL, NORM

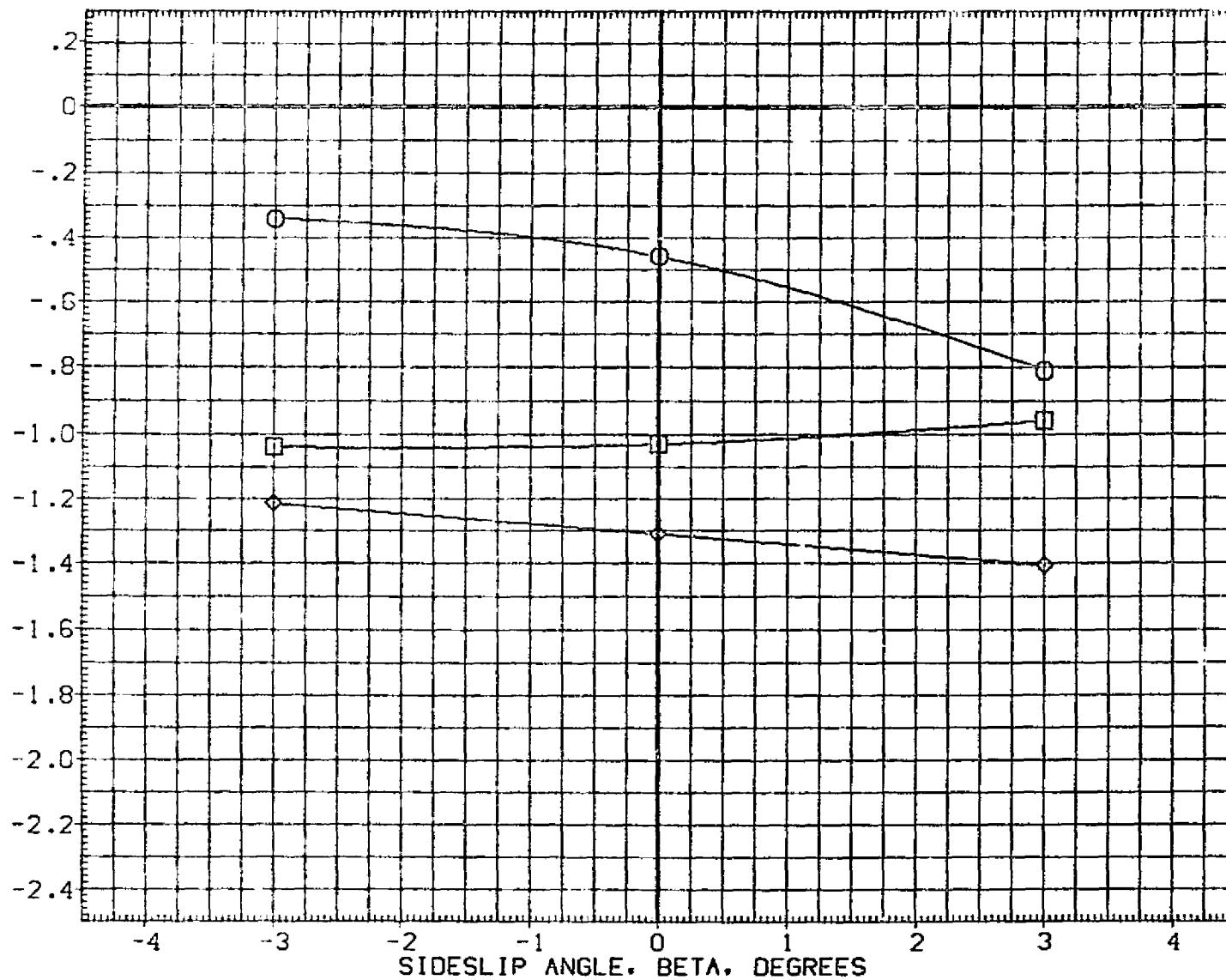


FIGURE 87. AMPLIFICATION FACTOR IN YAW, N82 JETS

01N82

LARC CFHT 118 (MA-22)

(CJA181)

SYMBOL

T/OA-1

MACH

PARAMETRIC VALUES

10.330

ALPHA

.000

○

47.500

BDFLAP

.000

T/OA

142.500

□

95.000

NO.JET

3.000

ELEVON

.000

◇

190.000

REFERENCE INFORMATION

SREF 2690.0000

50.FT.

LREF 474.6000

INCHES

BREF 936.6800

INCHES

XMRP 1076.7000

IN. X0

YMRP .0000

IN. Y0

ZMRP 375.0000

IN. Z0

SCALE .0100

RCS JET AMPLIFICATION FACTOR - ROLL, NCRM)

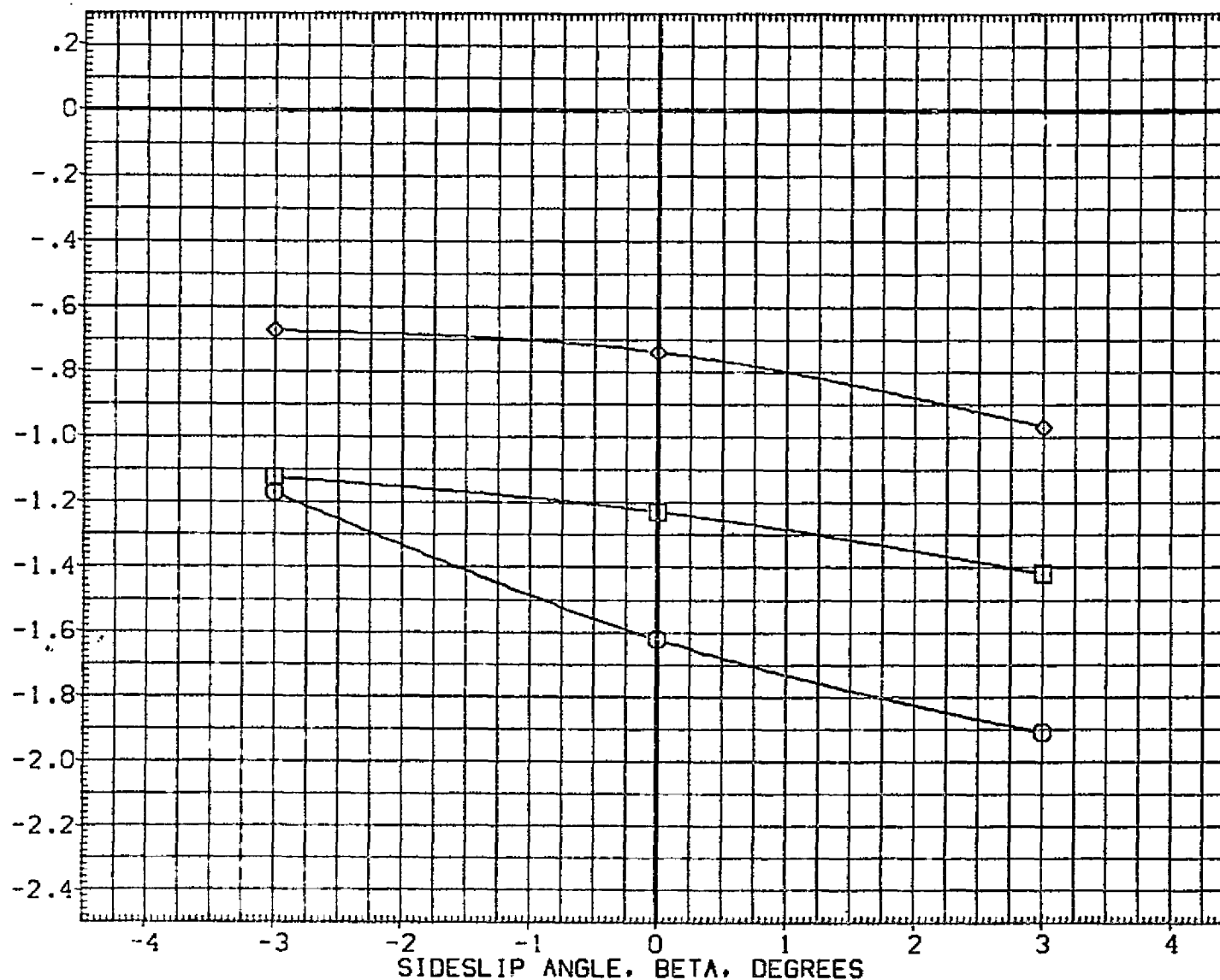


FIGURE 87. AMPLIFICATION FACTOR IN YAW, N82 JETS

SYMBOL	T/OA-1	PARAMETRIC VALUES
○	47.500	MACH 10.330 ALPHA 10.000
□	95.000	BDPLAP .000 T/OA 142.500
◇	190.000	NOJET 3.000 ELEVON .000

REFERENCE INFORMATION		
SREF	2690.0000	50.FT.
LREF	474.8000	INCHES
BREF	936.6800	INCHES
XMPP	1076.7000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCA E	.0100	

RCS JET AMPLIFICATION FACTOR - ROLL, N(RM)

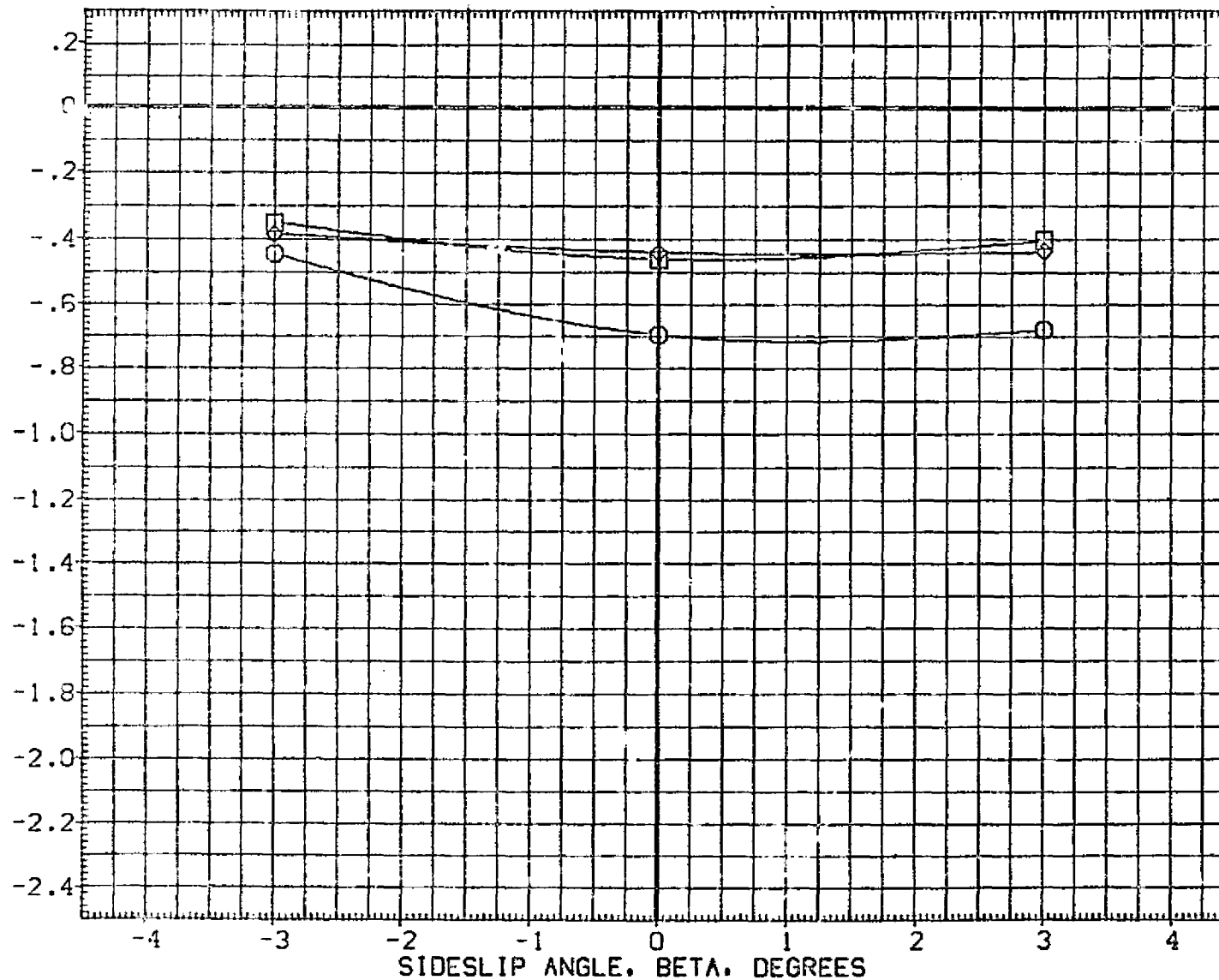


FIGURE 87. AMPLIFICATION FACTOR IN YAW, N82 JETS

01N82

LARC CEHT 118 (MA-22)

(CJA181)

SYMBOL	T/QA-1	PARAMETRIC VALUES
○	47.500	MACH 10.330 ALPHA 20.000
□	55.000	BDPLAP .000 T/QA 142.500
◇	150.000	NO JET 3.000 ELEVON .000

REFERENCE INFORMATION		
SREF	2690.0000	50. FT.
LREF	474.8000	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - ROLL, NORM

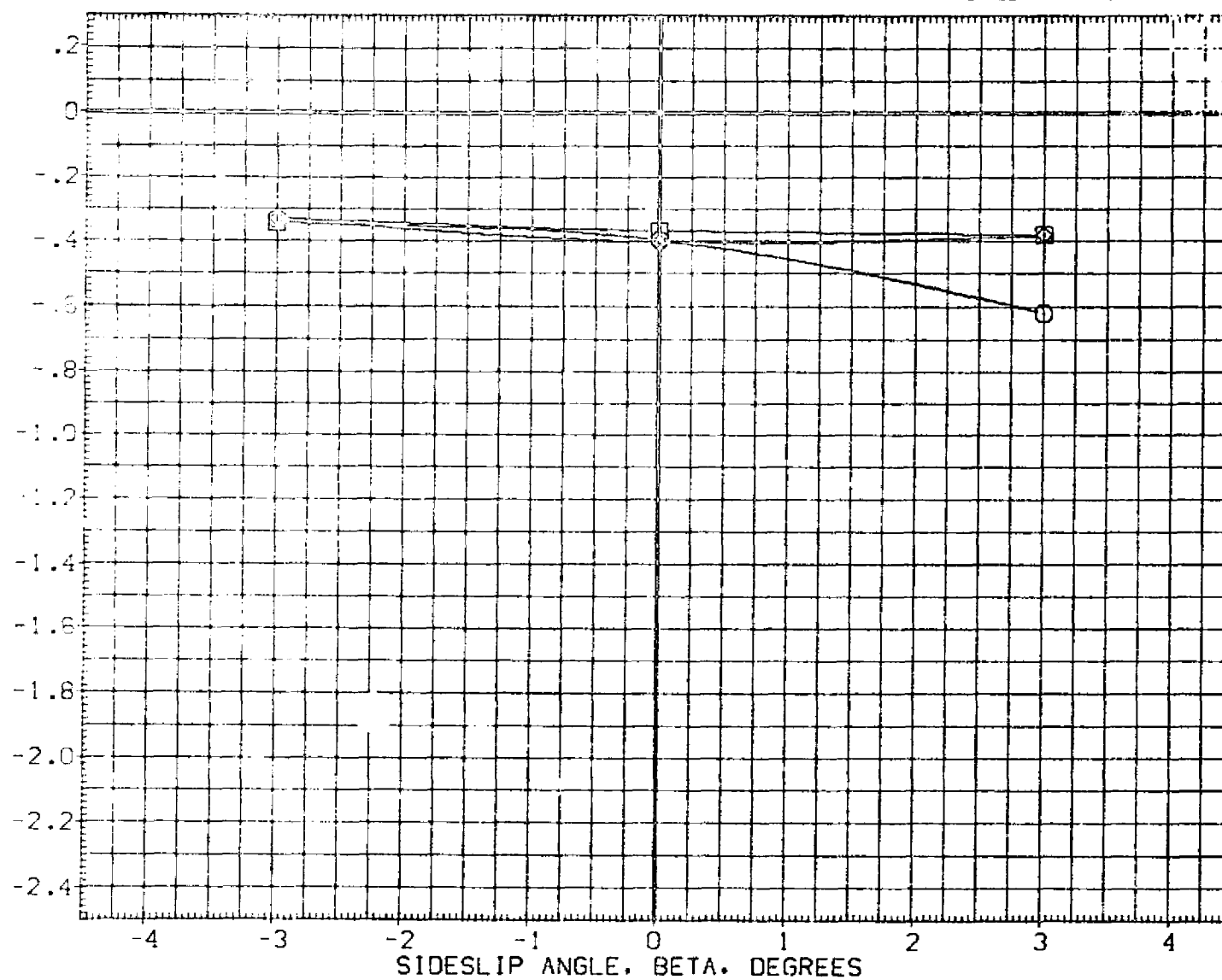


FIGURE 87. AMPLIFICATION FACTOR IN YAW, N82 JETS

SYMBOL

○
□
◇

T/QA-1

47.500

MACH

PARAMETRIC VALUES

10.330

ALPHA

35.000

BOFLAP

.000

T/QA

142.500

NO. JET

3.000

ELEVON

.000

REFERENCE INFORMATION

SREF	2690.0000	IN. FT.
LREF	471.8000	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - ROLL, N(RM)

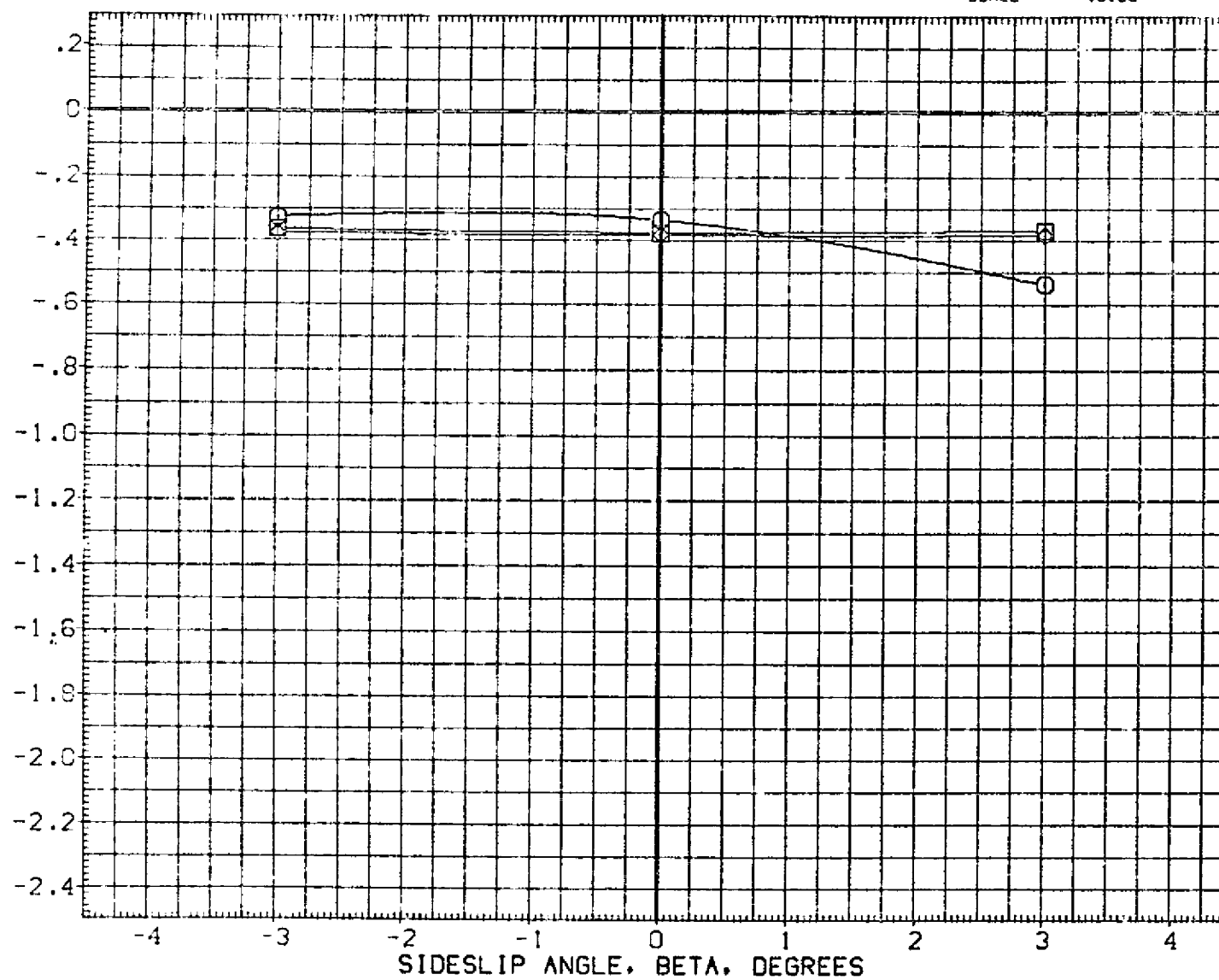


FIGURE 87. AMPLIFICATION FACTOR IN YAW, N82 JETS

01N82

1 ARC CEHT 118 (MA-22)

(CJA181)

SYMBOL	T/QA-1	PARAMETRIC VALUES
○	47.500	MACH 10.330 ALPHA -10.000
□	95.000	BDFLAP .000 T/QA 142.500
◇	190.000	NO.JET 3.000 ELEVON .000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8000	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - YAW, N(CYM)

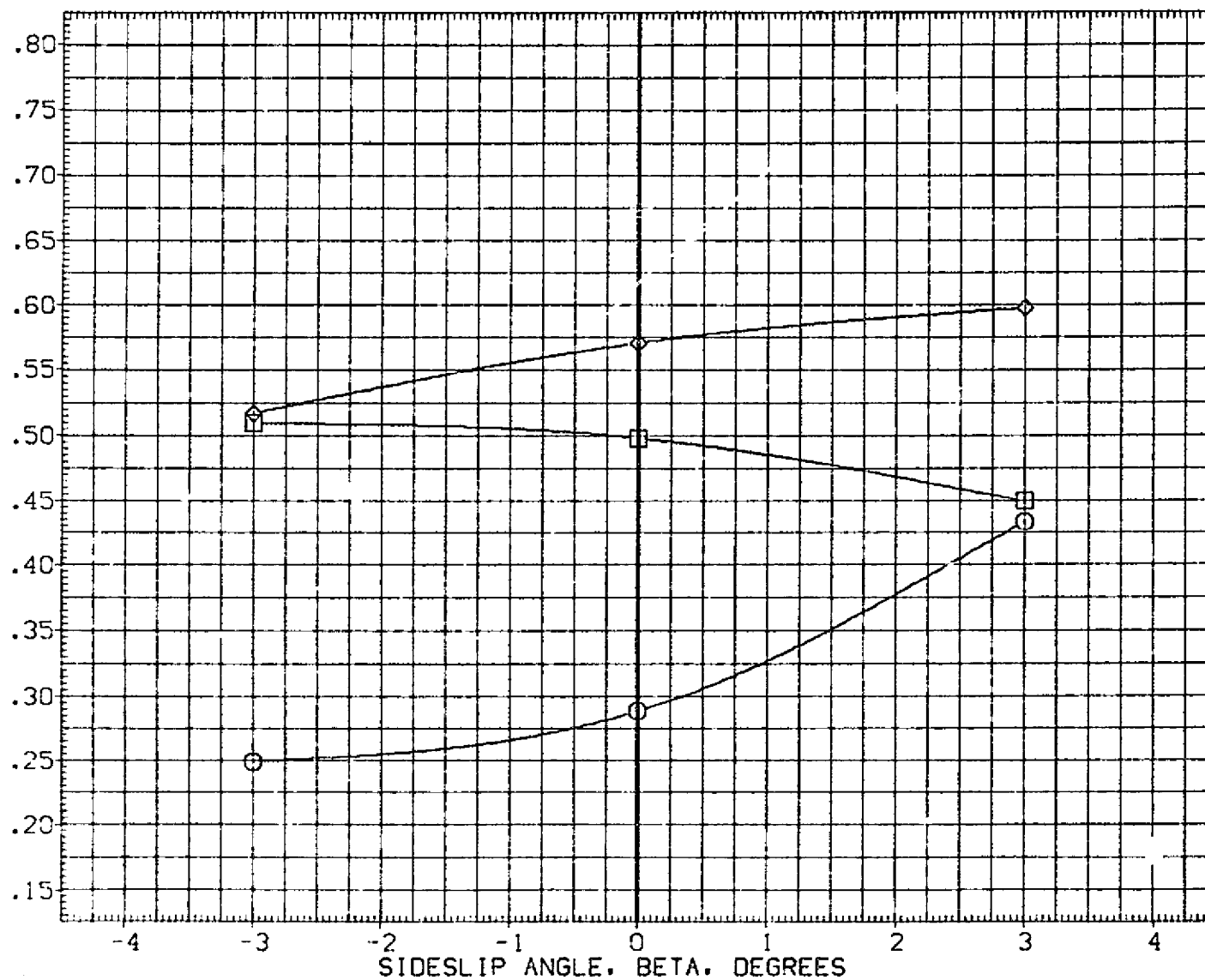


FIGURE 87. AMPLIFICATION FACTOR IN YAW, N82 JETS

SYMBOL	T/OA-1	PARAMETRIC VALUES
○	47.500	MACH 10.330 ALPHA .000
□	95.000	90FLAP .000 T/OA 142.500
◇	190.000	NO JET 3.000 ELEVON .000

REFERENCE INFORMATION		
SREF	2690.0000	90. FT.
LREF	474.8000	INCHES
BREF	938.6800	INCHES
XMRP	1076.7000	IN. 40
YMRP	.0000	IN. 40
ZMRP	375.0000	IN. 20
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - YAW, NCM)

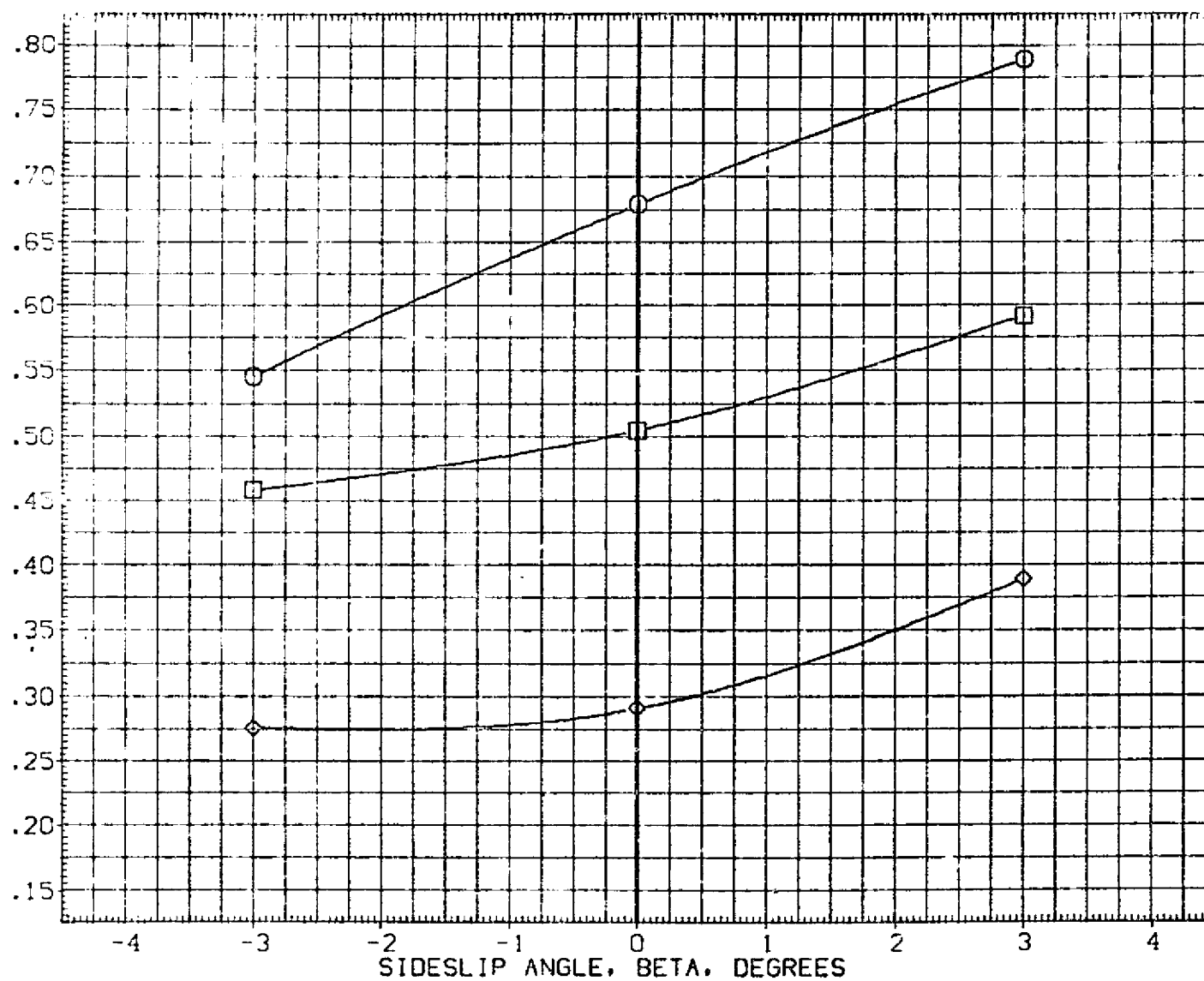


FIGURE 87. AMPLIFICATION FACTOR IN YAW, N82 JETS

01N92

LARC CFHT 118 (MA-22)

(CJA181)

SYMBOL

○
□
◇

T/QA-1

47.500

MACH

PARAMETRIC VALUES

10.330

ALPHA

10.000

BDFLAP

.000

T/QA

142.500

NO.JET

3.000

ELEVON

.000

REFERENCE INFORMATION

SREF

2690.0000

SQ.FT.

LREF

474.6000

INCHES

BREF

936.6800

INCHES

XMRP

1076.7000

IN. X0

YMRP

.0000

IN. Y0

ZMRP

375.0000

IN. Z0

SCALE

.0100

RCS JET AMPLIFICATION FACTOR - YAW, N(YM)

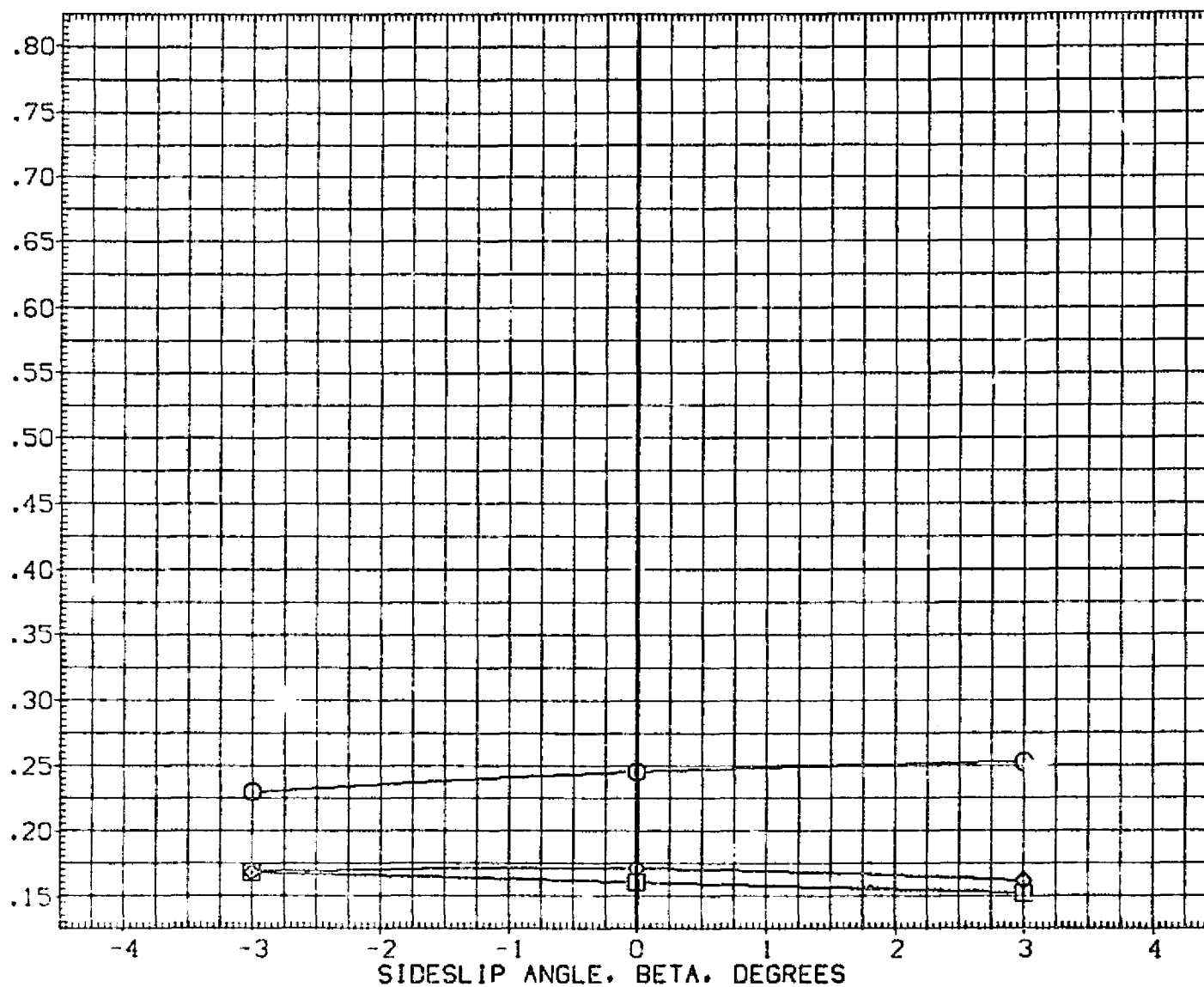


FIGURE 87. AMPLIFICATION FACTOR IN YAW, N82 JETS

SYMBOL	T/QA-1	MACH	PARAMETRIC VALUES	ALPHA	20.000
○	47.500	BCFLAP	.000	T/QA	142.500
◇	95.000	NOJET	3.000	ELEVON	.000
◇	190.000				

REFERENCE INFORMATION		
SREF	2690.0000	50. FT.
LREF	474.0000	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - YAW, N(YM)

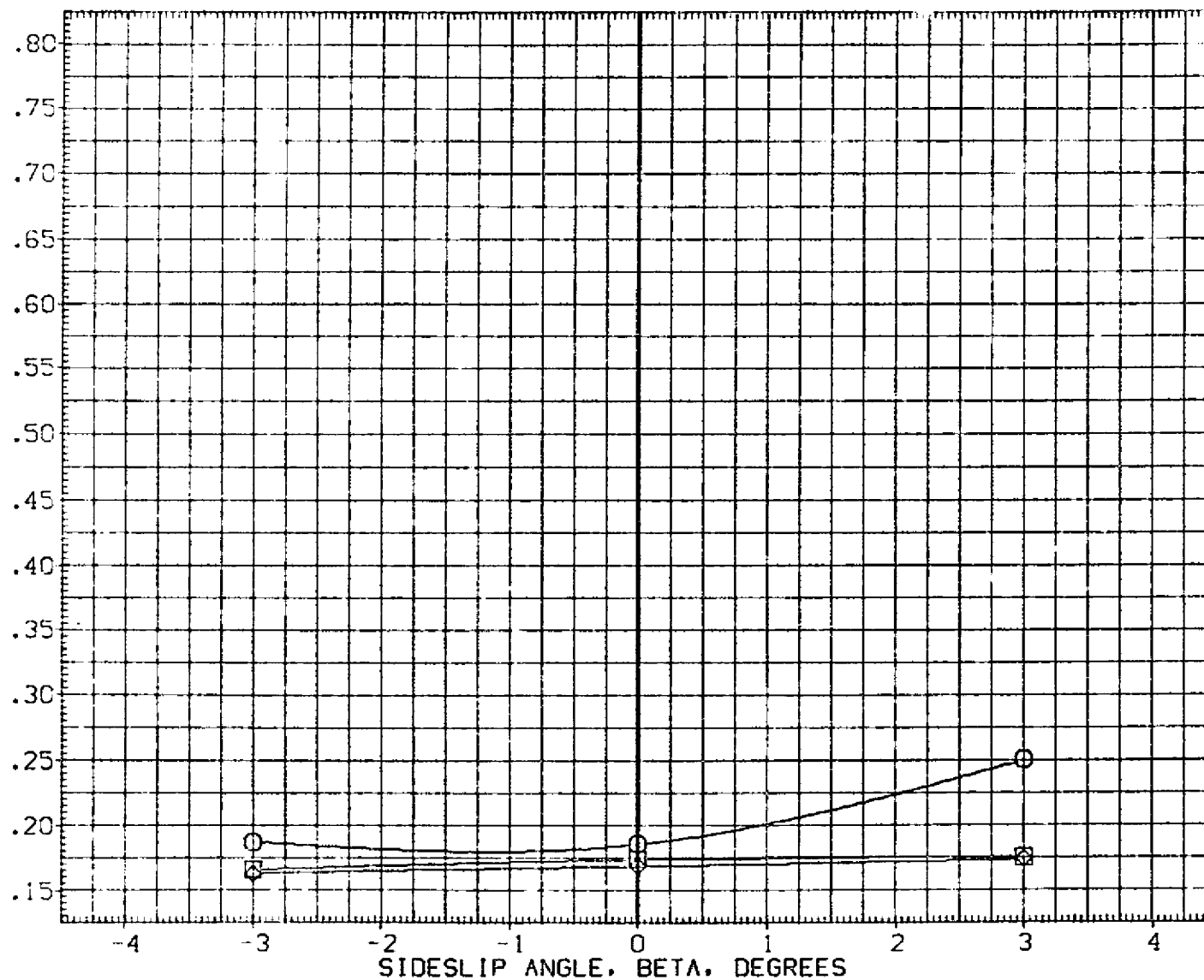


FIGURE 87. AMPLIFICATION FACTOR IN YAW, N82 JETS

01N82

LARC CFHT 118 (MA-22)

(CJA181)

SYMBOL	T/QA-1	PARAMETRIC VALUES			
○	47.500	MACH	10.330	ALPHA	35.000
□	95.000	BDFLAP	.000	T/QA	142.500
◇	190.000	NO.JET	3.000	ELEVON	.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8000	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - YAW, N(YM)

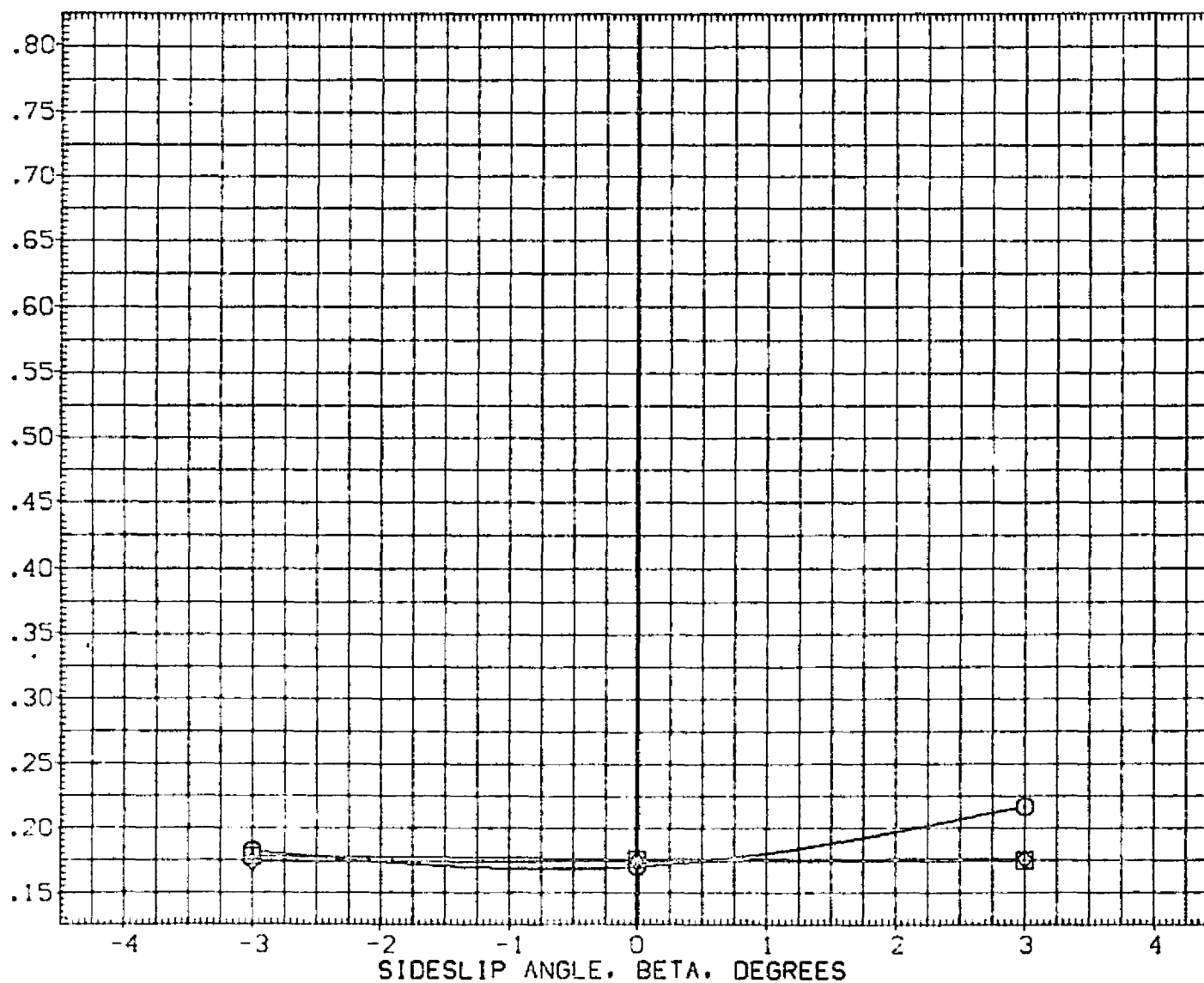


FIGURE 87. AMPLIFICATION FACTOR IN YAW, N82 JETS

SYMBOL



T/OA-1

47.500

MACH

PARAMETRIC VALUES

10.330

ALPHA

-10.000

BOFLAP

.000

T/OA

142.500

NOJET

3.000

ELEVON

.000

REFERENCE INFORMATION

SREF

2690.0000

SQ.FT.

LREF

474.8000

INCHES

BREF

936.5800

INCHES

XMRP

1076.7000

IN. X0

YMRP

.0000

IN. Y0

ZMRP

375.0000

IN. Z0

SCALE

.0100

RCS JET AMPLIFICATION FACTOR - NORMAL FORCE, N(NF)

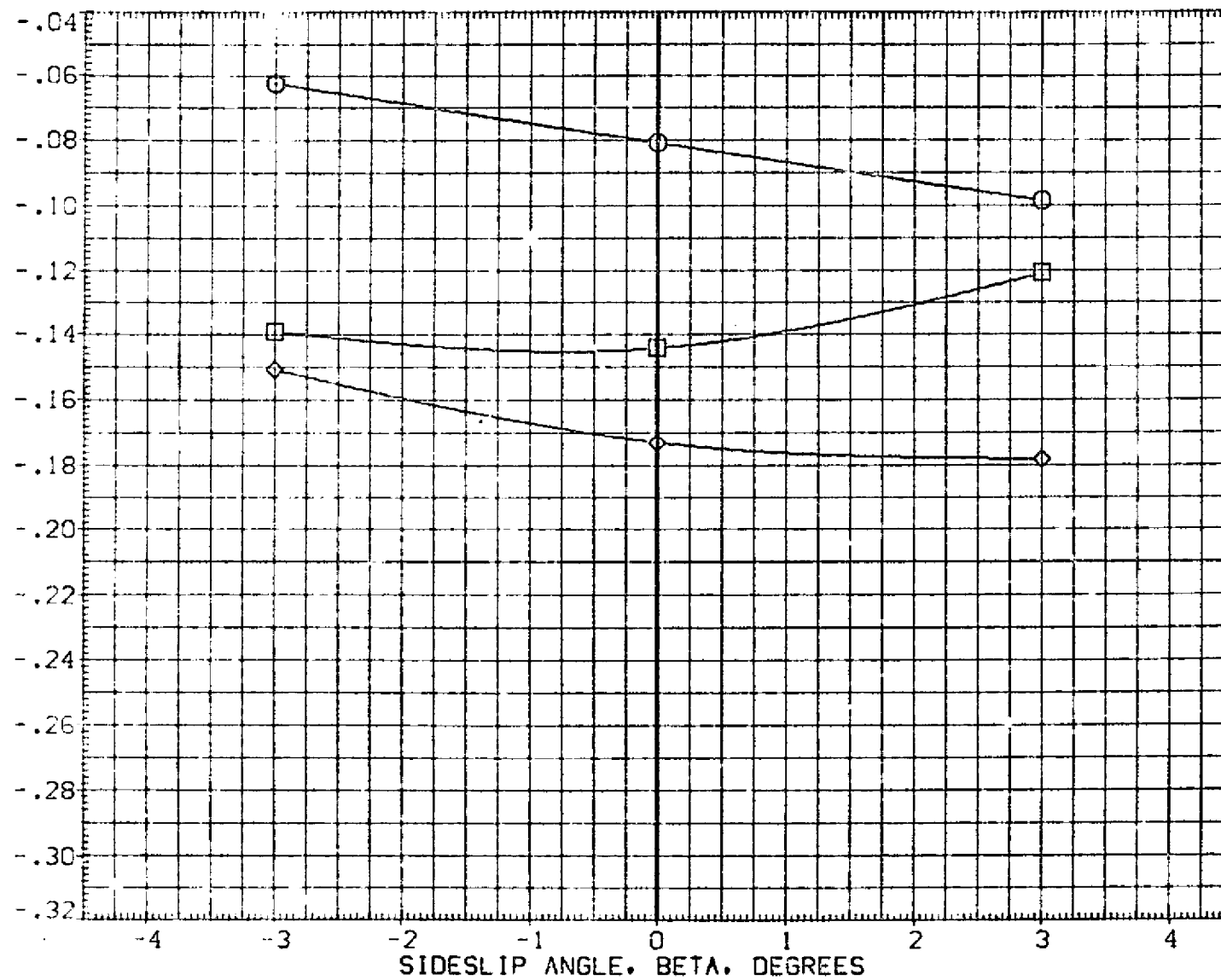


FIGURE 87. AMPLIFICATION FACTOR IN YAW, N82 JETS

01N82

LARC CFHT 118 (MA-22)

(CJA181)

SYMBOL	T/OA-1	PARAMETRIC VALUES
○	47.500	MACH 10.330 ALPHA .000
□	95.000	BDFLAP .000 T/OA 142.500
◇	190.000	NO JET 3.000 ELEVON .000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8000	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - NORMAL FORCE, N(NF)

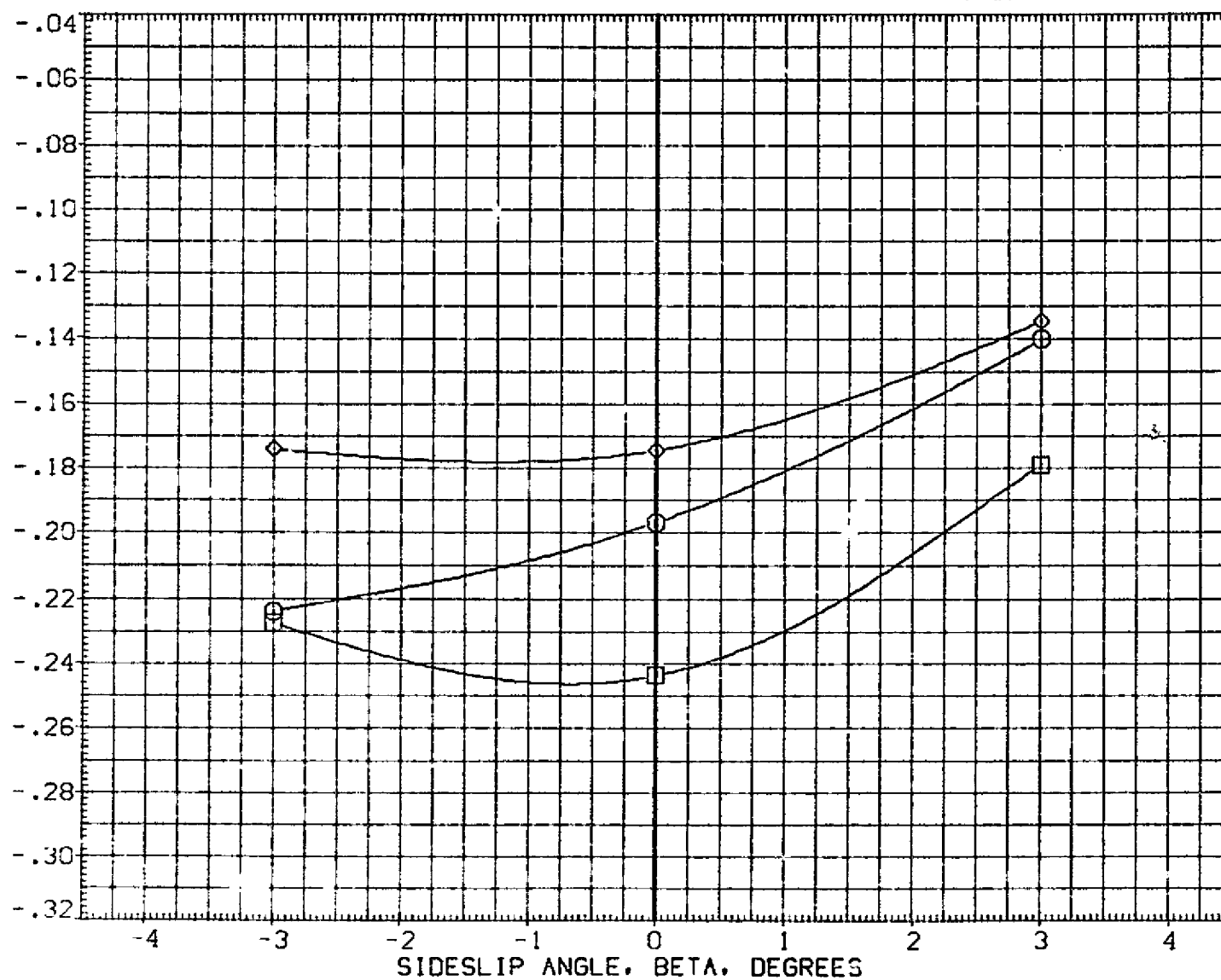


FIGURE 87. AMPLIFICATION FACTOR IN YAW, N82 JETS

SYMBOL

○
□
◇

T/QA-1

47.500

MACH

PARAMETRIC VALUES

10.330

ALPHA

10.000

BDFLAP

.000

T/QA

142.500

NO. JET

3.000

ELEVON

.000

REFERENCE INFORMATION

SREF 2690.0000

SQ. FT.

LREF 474.8000

INCHES

BREF 936.6800

INCHES

XMRP 1076.7000

IN. X0

YMRP .0000

IN. Y0

ZMRP 375.0000

IN. Z0

SCALE .0100

RCS JET AMPLIFICATION FACTOR - NORMAL FORCE, N(NF)

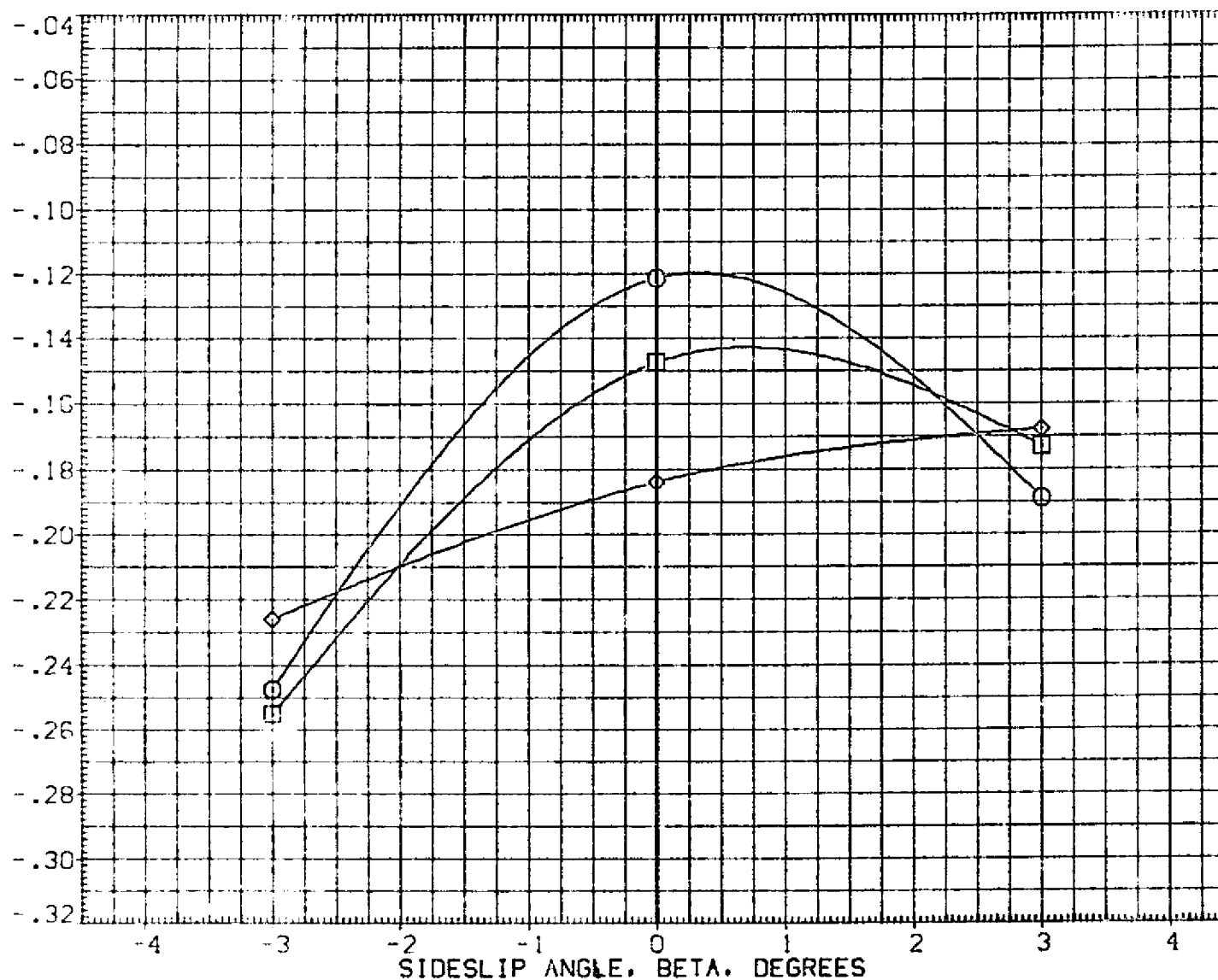


FIGURE 87. AMPLIFICATION FACTOR IN YAW, N82 JETS

01N82

LARC CEHT 118 (MA-22)

(CJA181)

SYMBOL

T/QA-1

PARAMETRIC VALUES

○

47.500

MACH

10.330

ALPHA

20.000

□

95.000

BOFLAP

.000

T/QA

142.500

◇

190.000

NO. JET

3.000

ELEVON

.000

REFERENCE INFORMATION

SREF

2690.0000

SQ. FT.

LREF

474.8000

INCHES

BREF

936.6800

INCHES

XMRP

1076.7000

IN. X0

YMRP

.0000

IN. Y0

ZMRP

375.0000

IN. Z0

SCALE

.0100

RCS JET AMPLIFICATION FACTOR - NORMAL FORCE, N(NF)

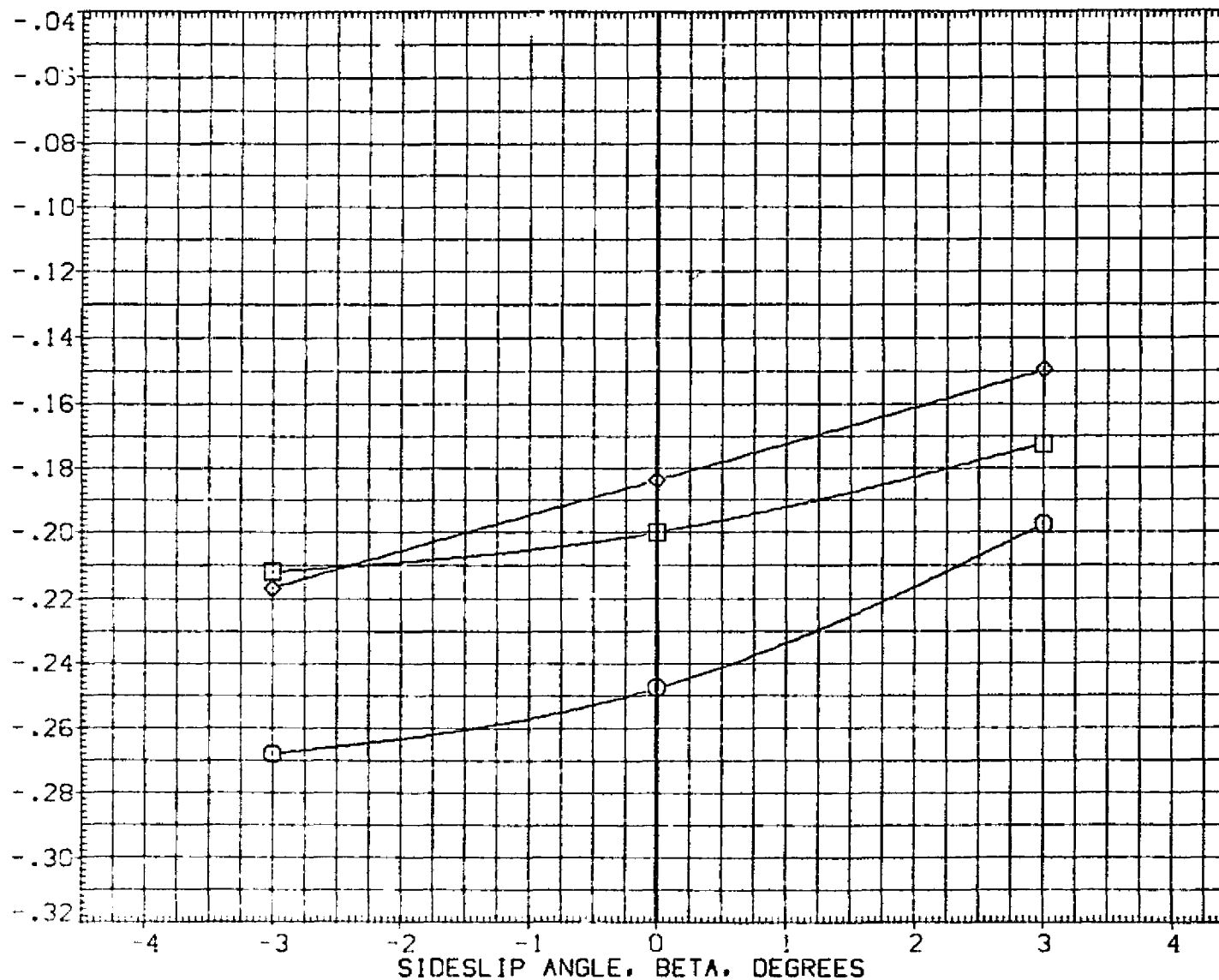


FIGURE 87. AMPLIFICATION FACTOR IN YAW, N82 JETS

SYMBOL	T/OA-1	PARAMETRIC VALUES
○	47.500	MACH 10.330 ALPHA 35.000
□	95.000	BDFLAP .000 T/OA 142.500
◇	190.000	NO JET 3.000 ELEVON .000

REFERENCE INFORMATION		
SREF	269.0000	50. FT.
LREF	473.3000	INCHES
BREF	938.6800	INCHES
XMRP	1076.7000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0100	

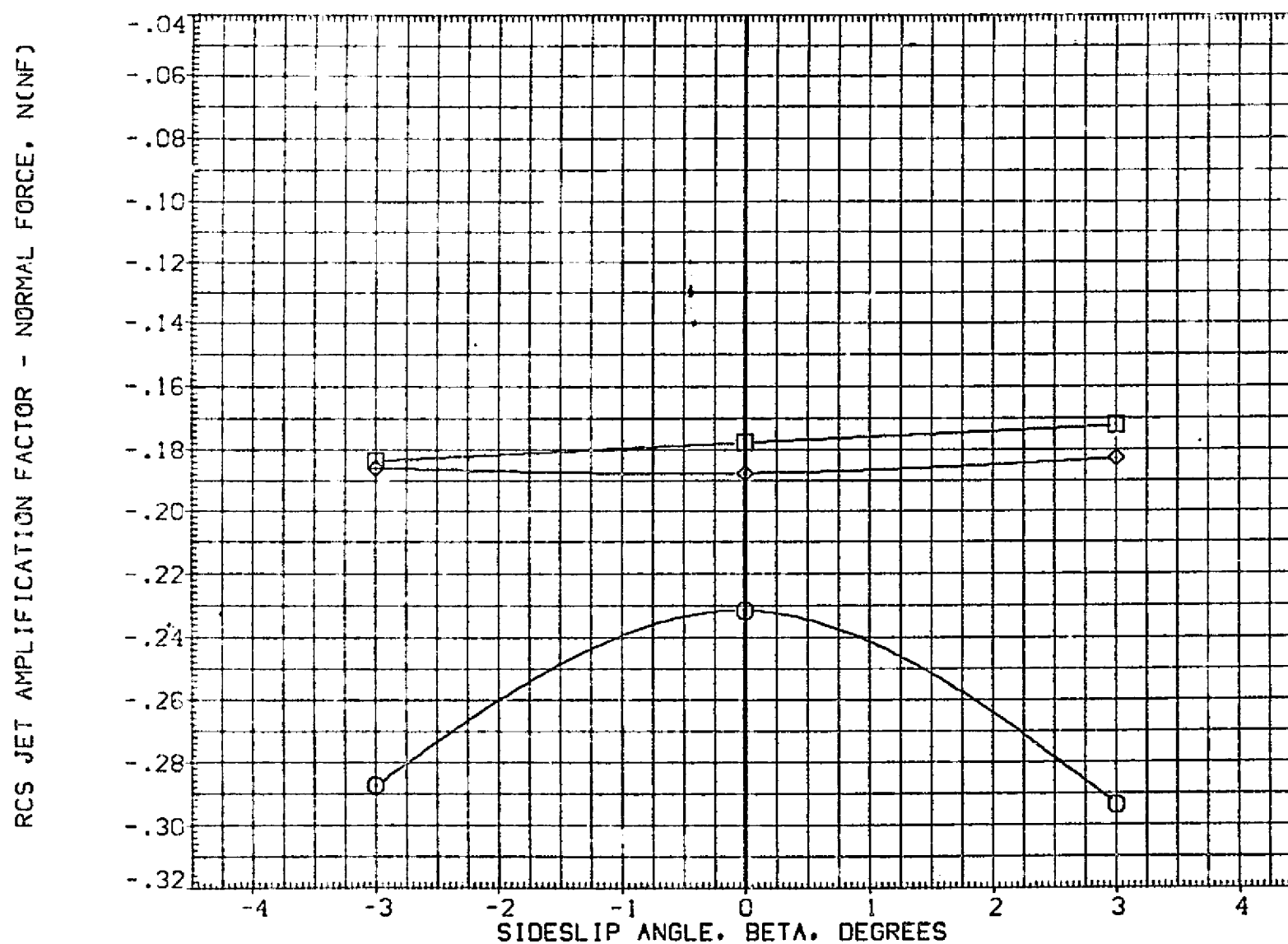


FIGURE 87. AMPLIFICATION FACTOR IN YAW, N82 JETS

01N82

LARC CFHT 118 (MA-22)

(CJA181)

SYMBOL

T/QA-1

PARAMETRIC VALUES

○
□
◇47.500
95.000
190.000MACH
BDFLAP
NOJET10.330
.000
3.000ALPHA
T/QA
ELEVON-10.000
142.500
.000

REFERENCE INFORMATION

SREF	2690.0000	50. FT.
LREF	474.8000	INCHES
BREF	936.6000	INCHES
XMRP	1076.7000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - AXIAL FORCE, N(AF)

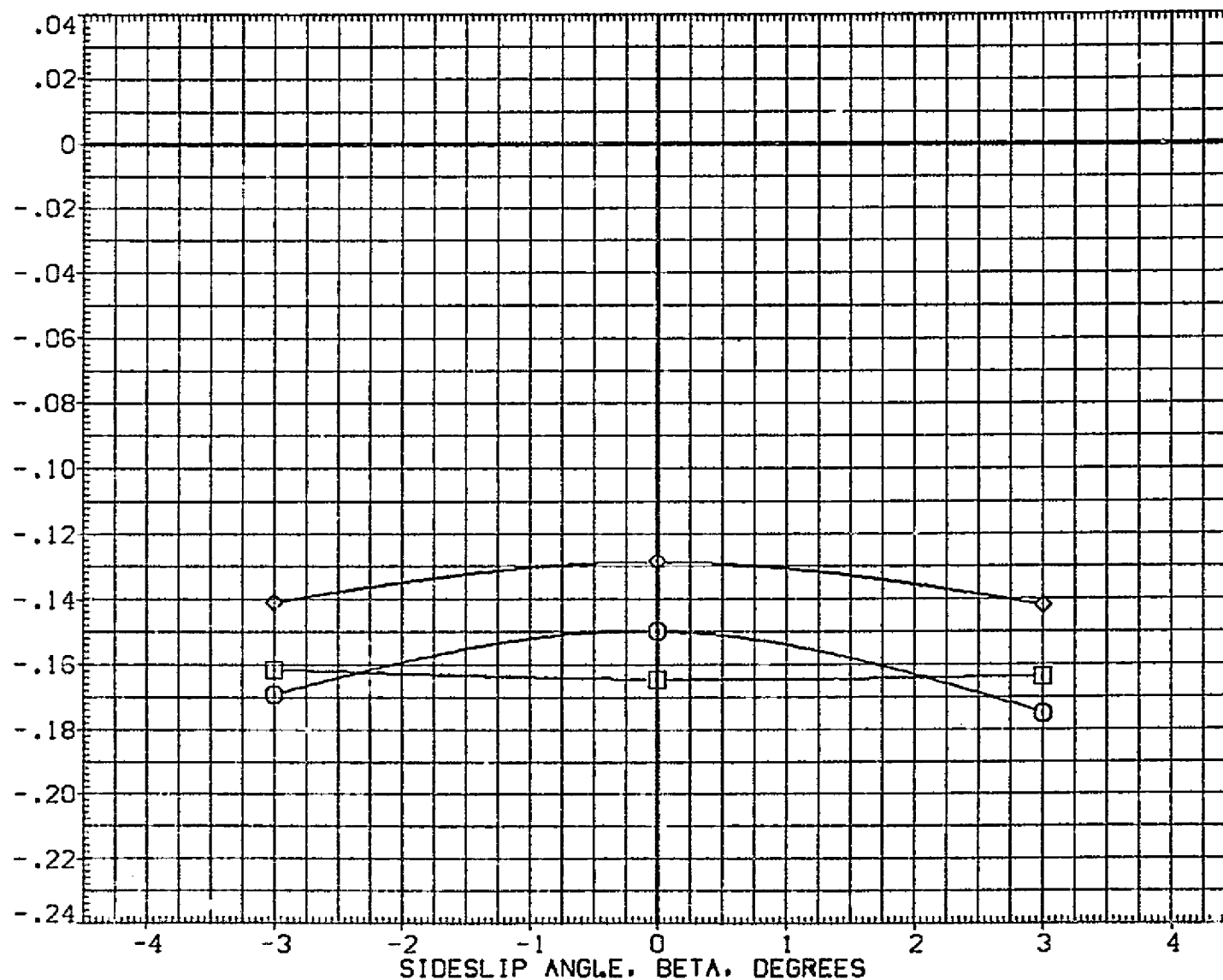


FIGURE 87. AMPLIFICATION FACTOR IN YAW, N82 JETS

SYMBOL	T/QA-1	PARAMETRIC VALUES
○	47.500	MACH 10.330 ALPHA .000
□	95.000	BDFLAP .000 T/QA 142.500
◇	190.000	NO.JET 3.000 ELEVON .000

REFERENCE INFORMATION		
SREF	2690.0000	50.FT.
LREF	474.8000	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0100	

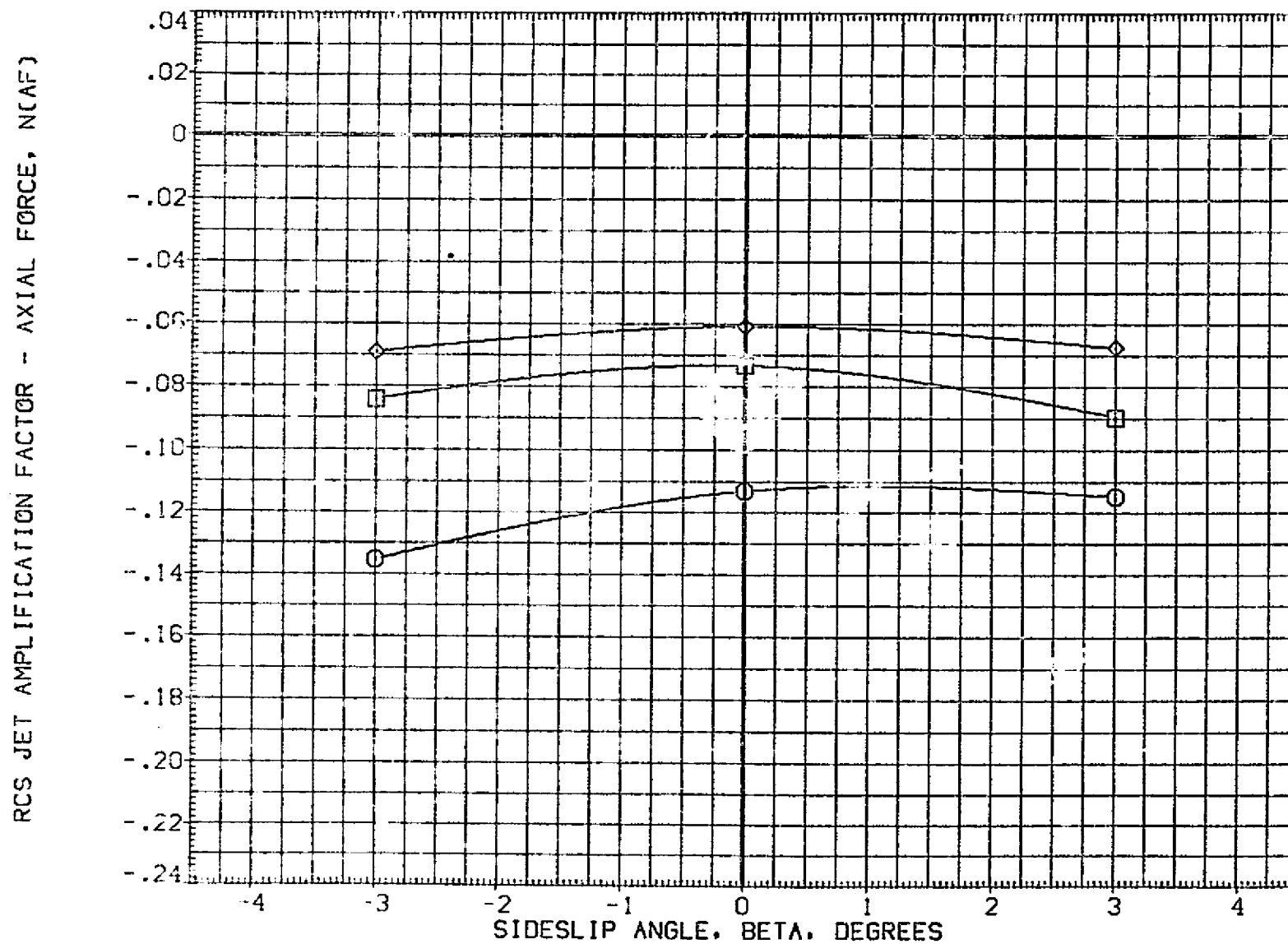


FIGURE 87. AMPLIFICATION FACTOR IN YAW, N82 JETS

01N82

LARC CFHT 118 (NA-22)

(CJA181)

SYMBOL

T/QA-1

PARAMETRIC VALUES

○
□
◇

47.500
95.000
190.000

MACH
BDFLAP
NOJET

10.330
.000
3.000

ALPHA
T/QA
ELEVON

10.000
142.500
.000

REFERENCE INFORMATION

SREF 2690.0000 SQ FT.
LREF 474.8000 INCHES
BREF 936.6800 INCHES
XMRP 1076.7000 IN. X0
YMRP .0000 IN. Y0
ZMRP 375.0000 IN. Z0
SCALE .0100

RCS JET AMPLIFICATION FACTOR - AXIAL FORCE, N(AF)

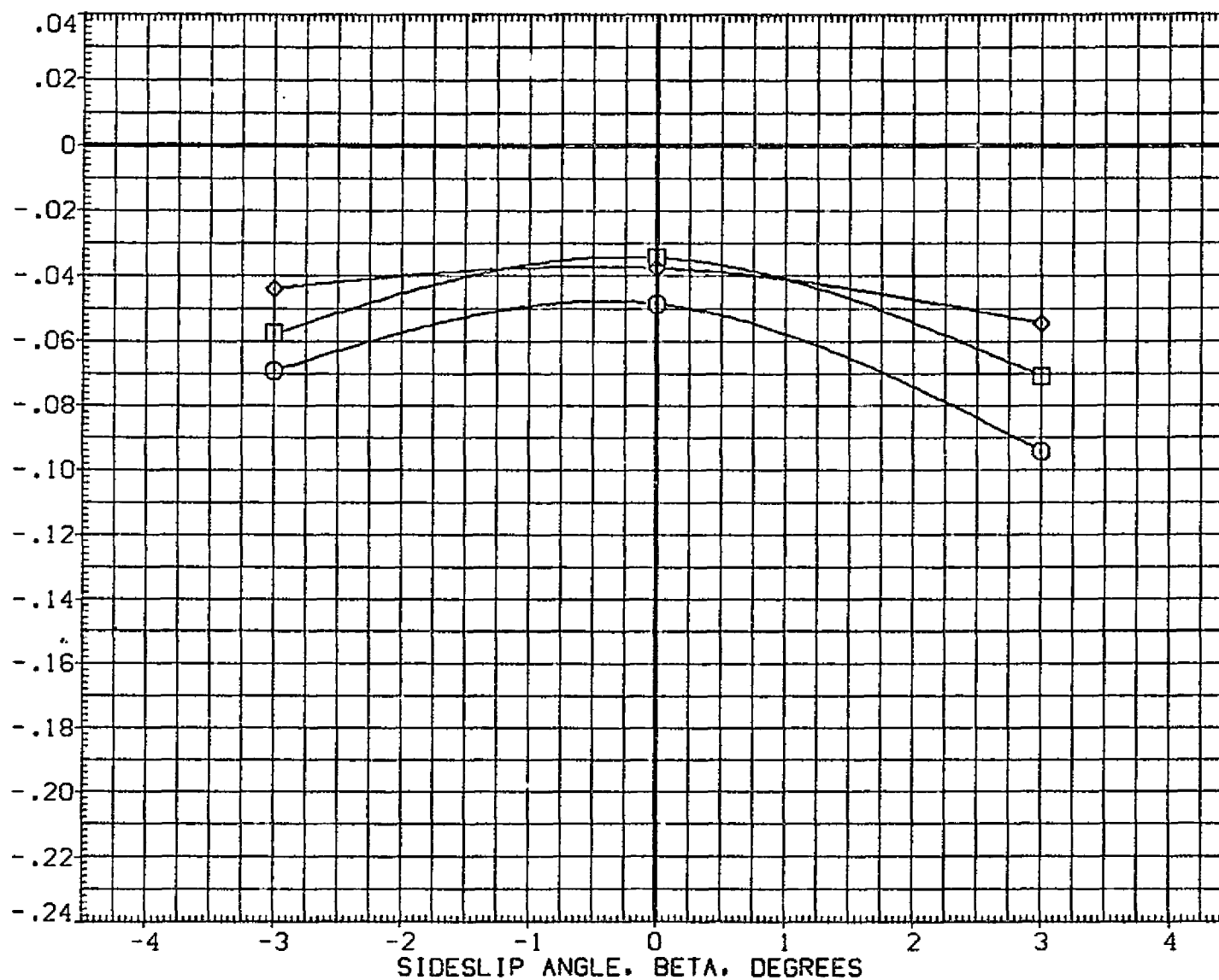


FIGURE 87. AMPLIFICATION FACTOR IN YAW, N82 JETS

SYMBOL

T/OA-1

MACH

PARAMETRIC VALUES

10.330

ALPHA

20.000

□

95.000

BD FLAP

.000

T/OA

142.500

◇

190.000

NO. JET

3.000

ELEVON

.000

REFERENCE INFORMATION

SREF

2690.0000

SQ. FT.

LREF

474.8000

INCHES

BREF

936.6800

INCHES

XMRP

1076.7000

IN. YO

YMRP

.0000

IN. YO

ZMRP

375.0000

IN. ZO

SCALE

.0100

RCS JET AMPLIFICATION FACTOR - AXIAL FORCE, N(AF)

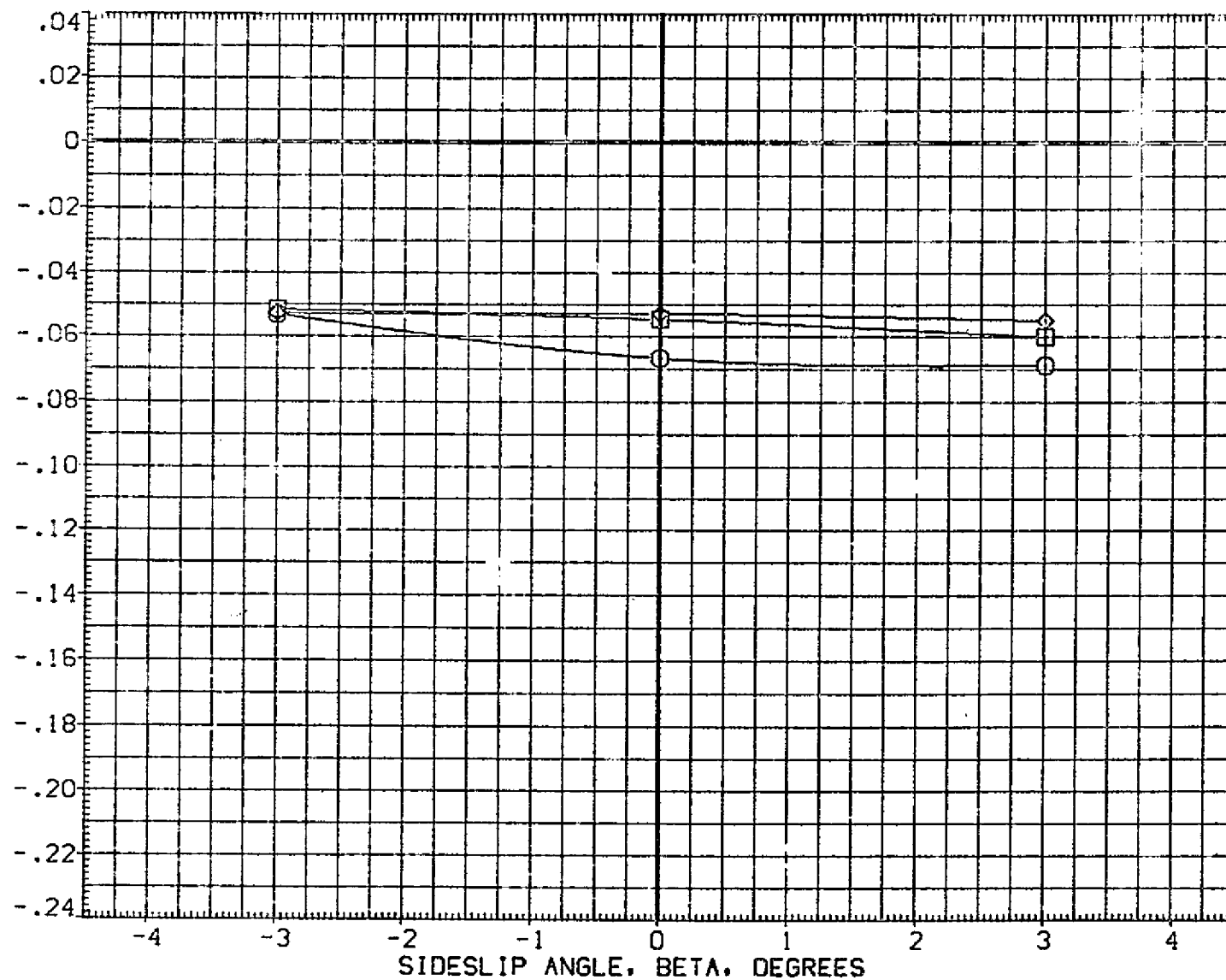


FIGURE 87. AMPLIFICATION FACTOR IN YAW, N82 JETS

01N82

LARC CFHT 118 (MA-22)

(CJA181)

SYMBOL

T/OA-1

PARAMETRIC VALUES

REFERENCE INFORMATION

○
□
◇47.500
95.000
190.000MACH
BDFLAP
NO.JET10.330
.000
3.000ALPHA 35.000
T/OA 142.500
ELEVON .000SREF 2690.0000
LREF 474.8000
BREF 936.6000
XMRP 1076.7000
YMRP .0000
ZMRP 375.0000
SCALE .0100SQ.FT.
INCHES
INCHES
IN. X0
IN. Y0
IN. Z0

RCS JET AMPLIFICATION FACTOR - AXIAL FORCE, N(AF)

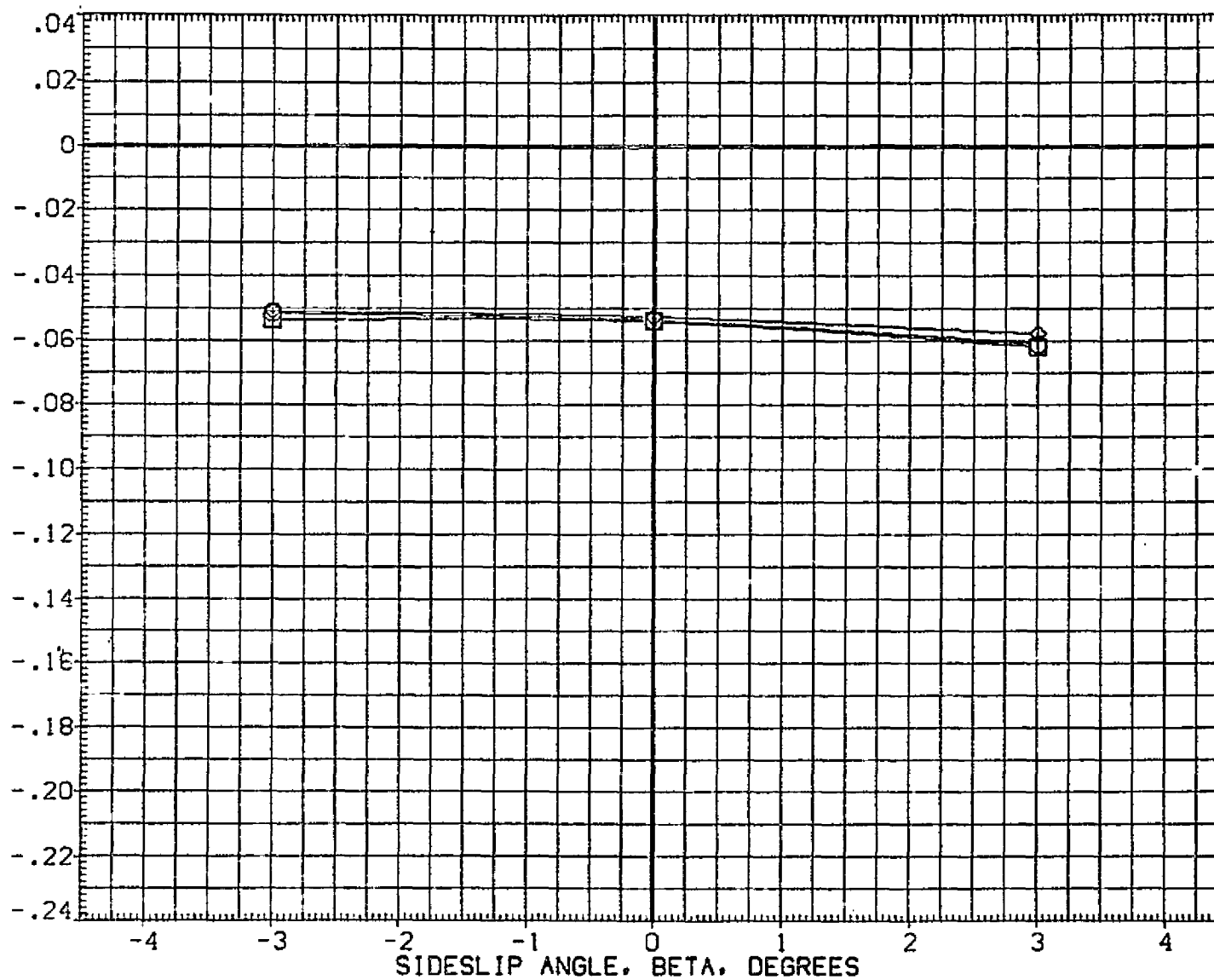


FIGURE 87. AMPLIFICATION FACTOR IN YAW, N82 JETS

SYMBOL	T/OA-1	PARAMETRIC VALUES			
○	47.500	MACH	10.330	ALPHA	-10.000
□	95.000	BDFLAP	.000	T/OA	142.500
◇	190.000	NO.JET	3.000	ELEVON	.000

REFERENCE INFORMATION		
SREF	2690.0000	IN. 1.
LREF	474.8000	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - SIDE FORCE, N(SF)

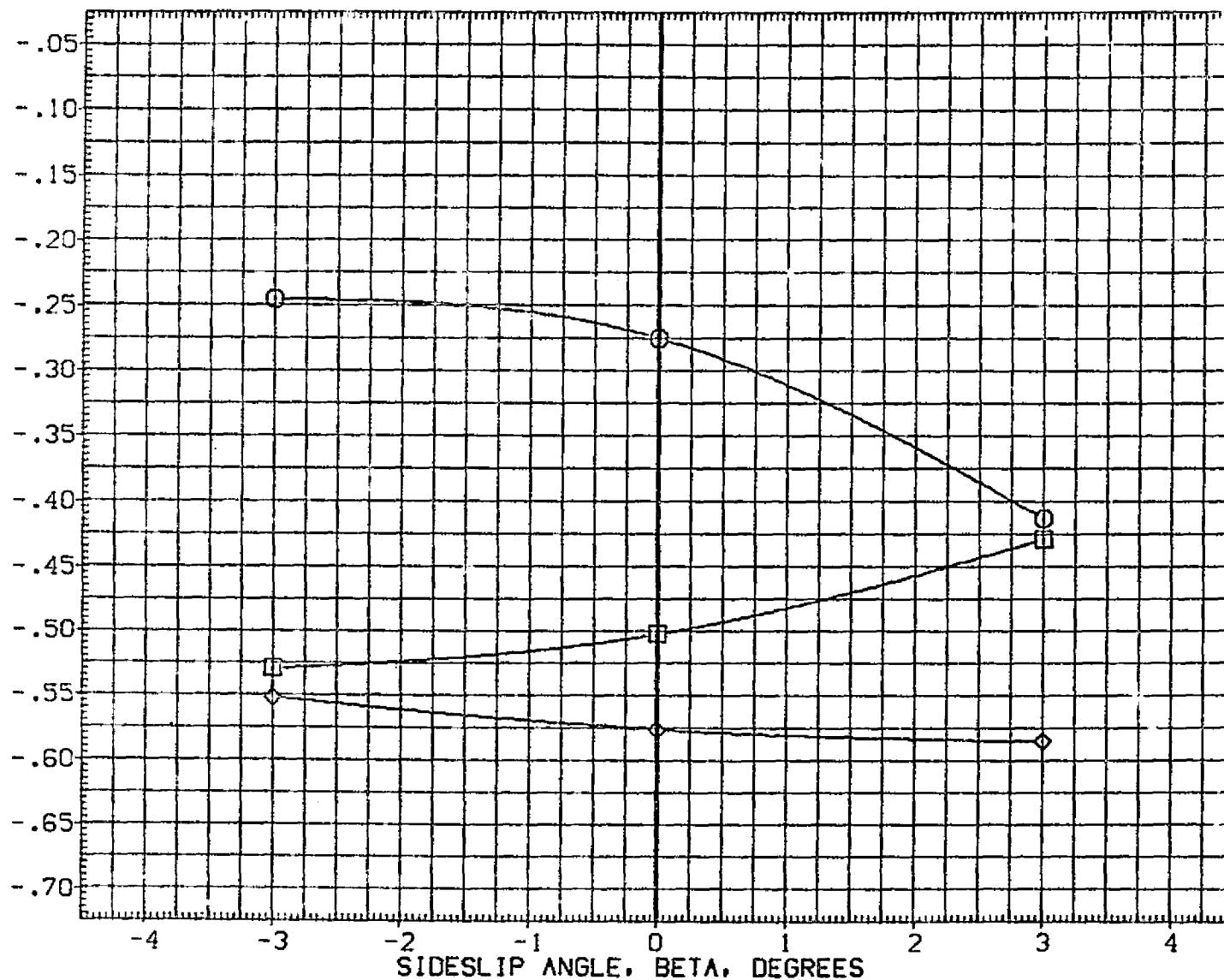


FIGURE 87. AMPLIFICATION FACTOR IN YAW, N82 JETS

01N82

LARC CFHT 118 (MA-22)

(CJA181)

SYMBOL

T/OA-1

MACH

PARAMETRIC VALUES

10.330

ALPHA

.000

□

95.000

BD FLAP

.000

T/OA

142.500

◇

190.000

NO. JET

3.000

ELEVON

.000

REFERENCE INFORMATION

SREF

2690.0000

SQ. FT.

LREF

474.8000

INCHES

BREF

936.6800

INCHES

XMRP

1076.7000

IN. X0

YMRP

.0000

IN. Y0

ZMRP

375.0000

IN. Z0

SCALE

.0100

RCS JET AMPLIFICATION FACTOR - SIDE FORCE, N(SF)

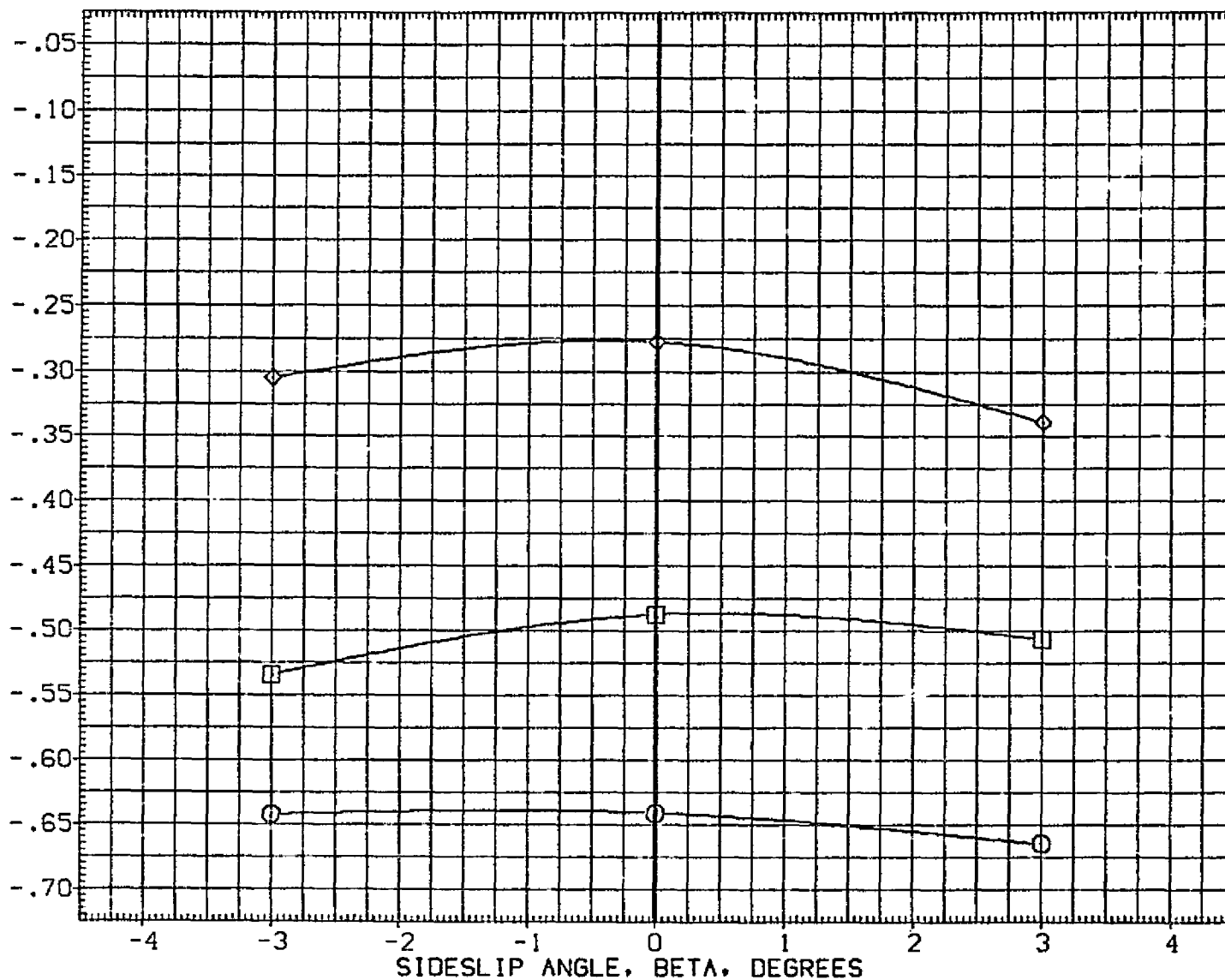


FIGURE 87. AMPLIFICATION FACTOR IN YAW, N82 JETS

SYMBOL	T/QA-1	MACH	PARAMETRIC VALUES	ALPHA	10.000
○	47.500	80FLAP	.000	T/QA	142.500
□	95.000	NOJET	3.000	ELEVON	.000
◇	190.000				

REFERENCE INFORMATION

SREF	2690.0000	50. FT.
LREF	474.8000	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. 30
YMRP	.0000	IN. 30
ZMRP	375.0000	IN. 70
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - SIDE FORCE, N(SF)

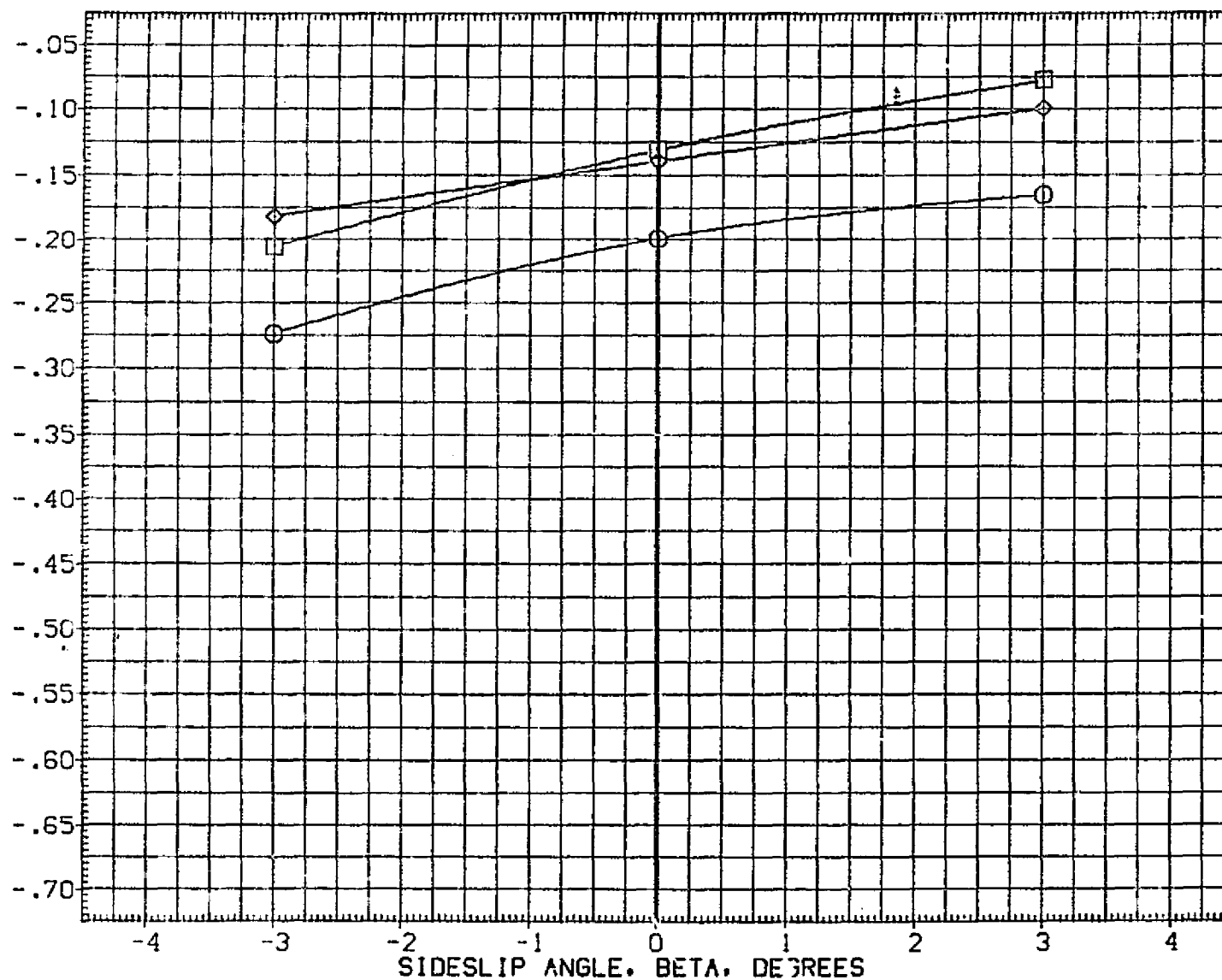


FIGURE 87. AMPLIFICATION FACTOR IN YAW, N82 JETS

01N82

LARC CFHT 118 (MA-22)

(CJA181)

SYMBOL

○
□
◇

T/QA-1

47.500

MACH

PARAMETRIC VALUES

10.330

ALPHA

20.000

BOFLAP

.000

T/QA

142.500

NO.JET

3.000

ELEVON

.000

REFERENCE INFORMATION

SREF

2690.0000

SQ.FT.

LREF

474.8000

INCHES

BREF

936.6800

INCHES

XMRP

1076.7000

IN. X0

YMRP

.0000

IN. Y0

ZMRP

375.0000

IN. Z0

SCALE

.0100

RCS JET AMPLIFICATION FACTOR - SIDE FORCE, N(SF)

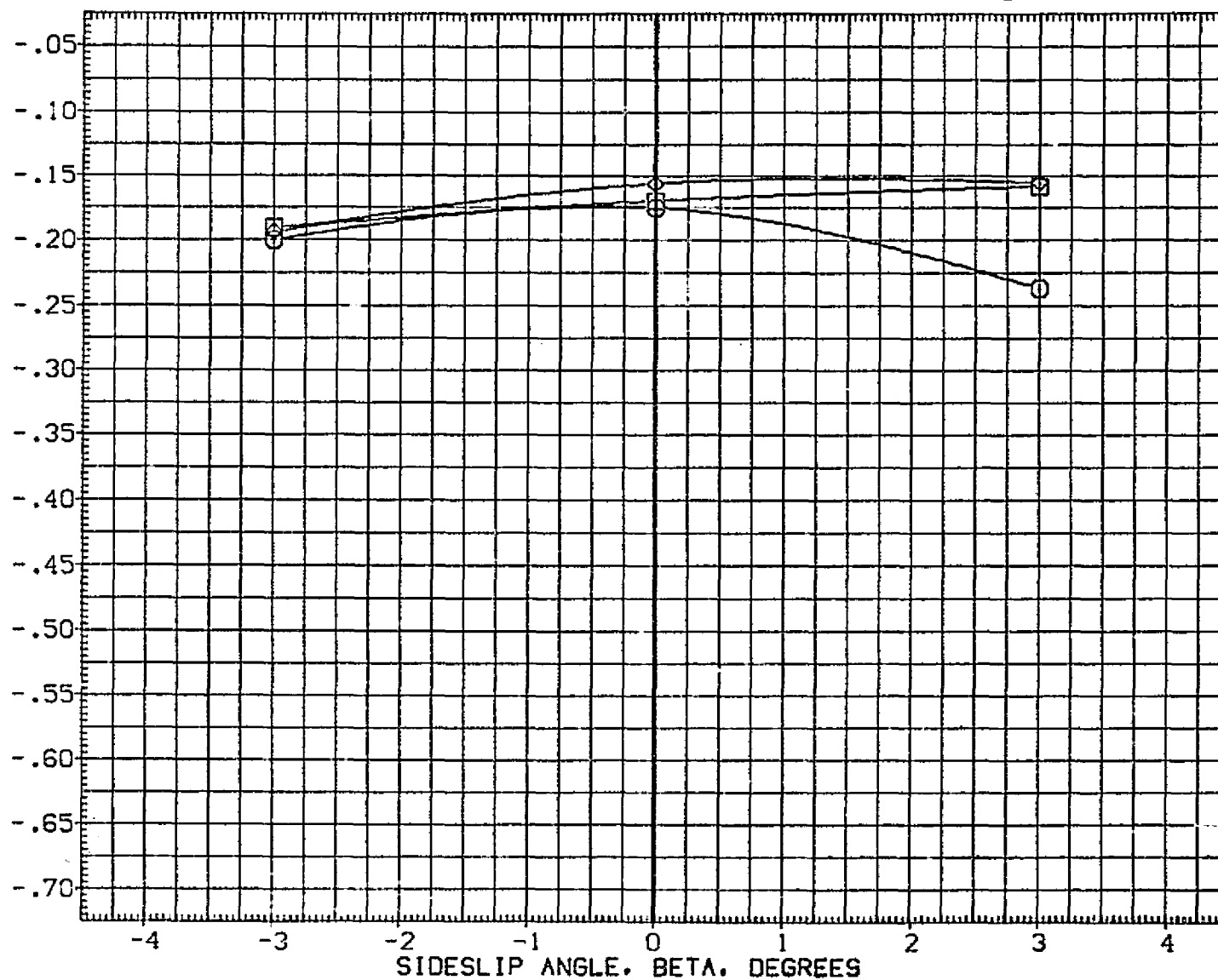


FIGURE 87. AMPLIFICATION FACTOR IN YAW, N82 JETS

SYMBOL

T/QA-1

MACH

PARAMETRIC VALUES

10.330

ALPHA

35.000

○
□
◇

47.500

80FLAP

.000

T/QA

142.500

95.000

NOJET

3.000

ELEVON

.000

190.000

REFERENCE INFORMATION

SREF

2690.0000

SQ.FT.

LREF

474.8000

INCHES

BREF

936.6800

INCHES

XMRP

1076.7000

IN. X0

YMRP

.0000

IN. Y0

ZMRP

375.0000

IN. Z0

SCALE

.0100

RCS JET AMPLIFICATION FACTOR - SIDE FORCE, N(SF)

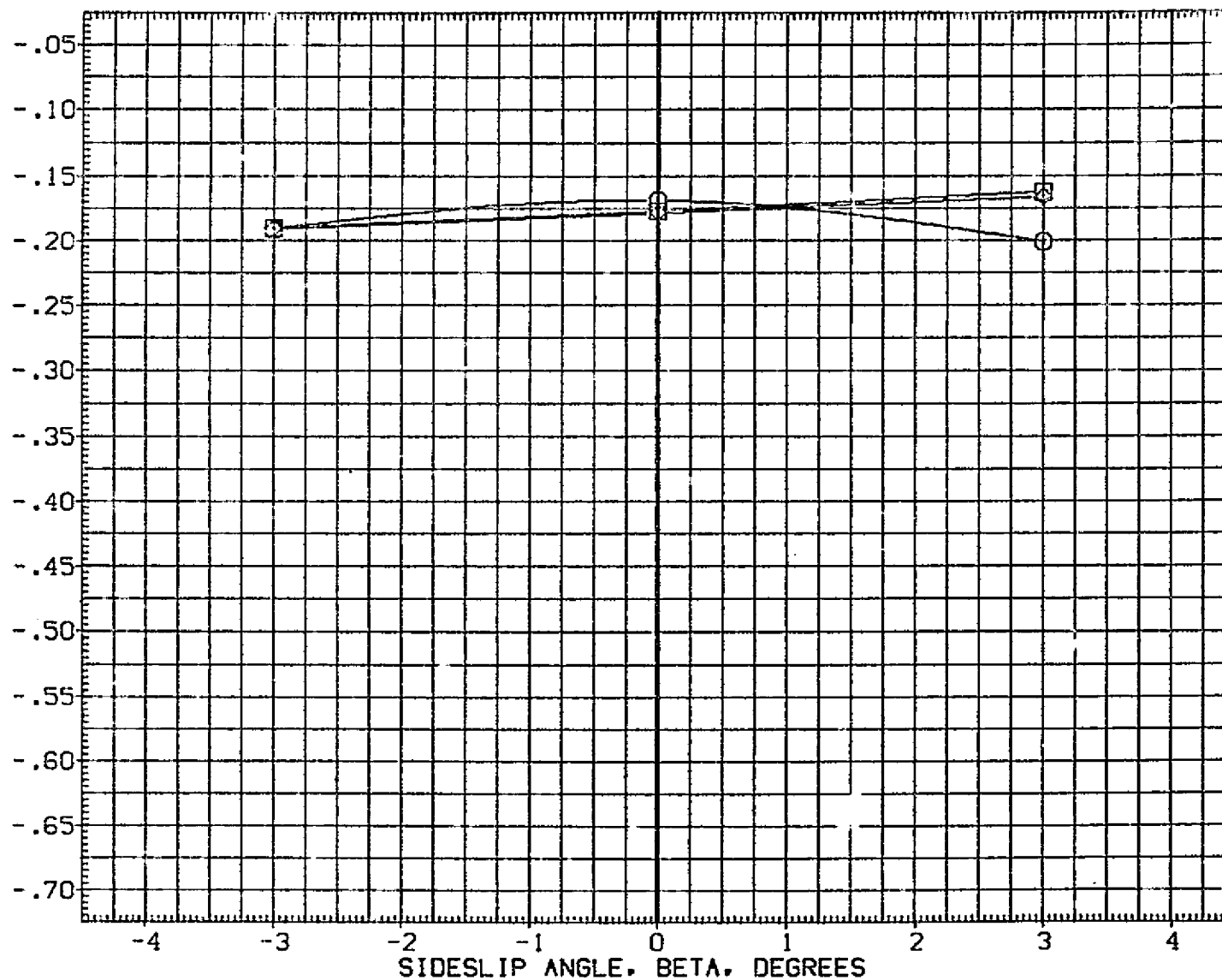


FIGURE 87. AMPLIFICATION FACTOR IN YAW, N82 JETS

01N51

LARC CFHT 118 (MA-22)

(CJA128)

SYMBOL

T/QA-1

PARAMETRIC VALUES

○

47.500

MACH

10.330

ALPHA

-10.000

□

95.000

BDFLAP

.000

T/QA

190.000

◇

127.700

NO. JET

4.000

ELEVON

.000

REFERENCE INFORMATION

SREF

2690.0000

SQ. FT.

LREF

474.1000

INCHES

BREF

936.6800

INCHES

XMRP

1076.7000

IN. X0

YMRP

.0000

IN. Y0

ZMRP

375.0000

IN. Z0

SCALE

.0100

RCS JET AMPLIFICATION FACTOR - PITCH, N(CPM)

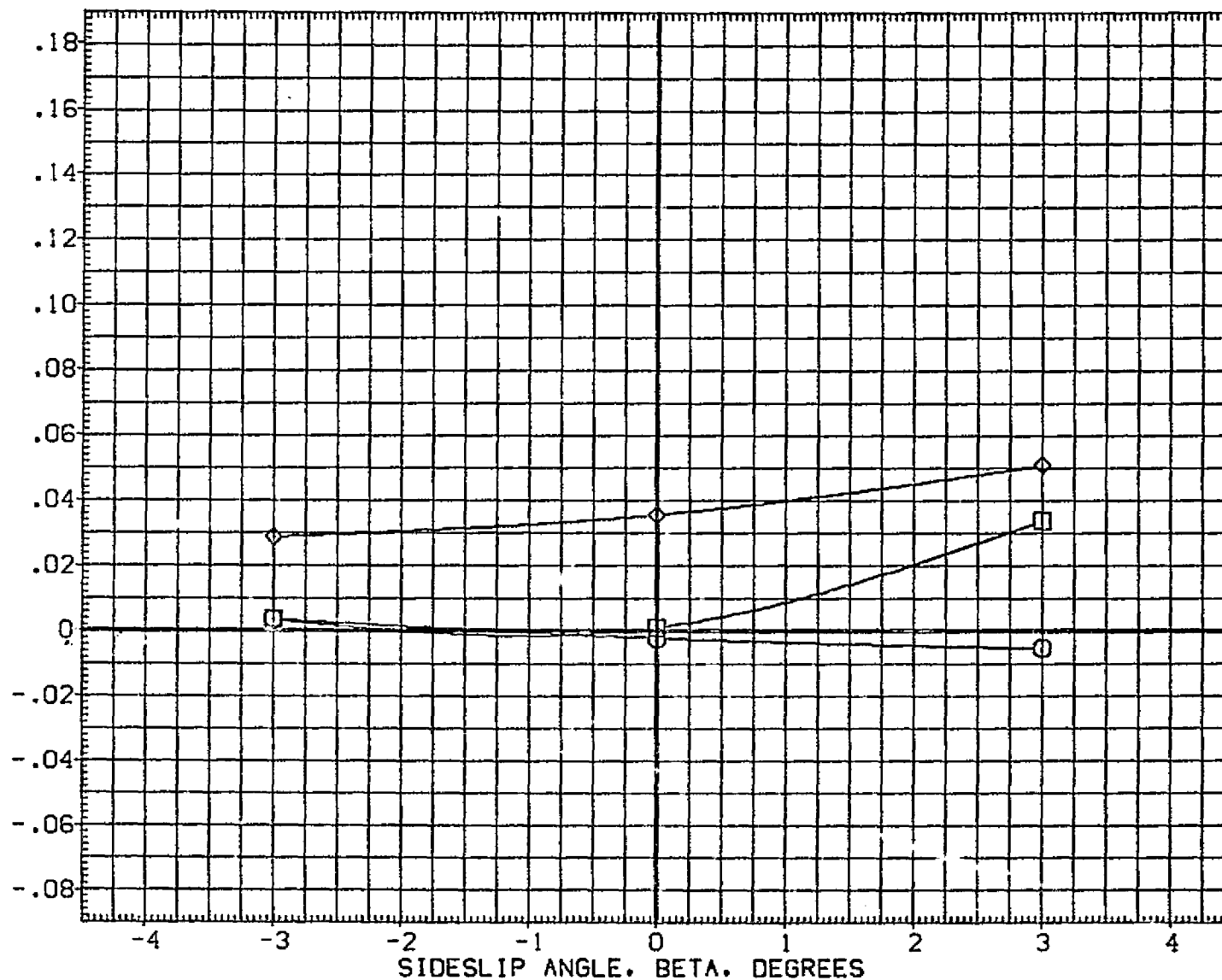


FIGURE 88. AMPLIFICATION FACTOR IN YAW, N51 JETS

SYMBOL	T/OA-1	PARAMETRIC VALUES
○	47.500	MACH 10.330 ALPHA .000
□	95.000	BDFLAP .000 T/OA 190.000
◇	127.700	NO-JET 4.000 ELEVON .000

REFERENCE INFORMATION		
SREF	2690.0000	50. FT.
LREF	474.8000	INCHES
BREF	123.6800	INCHES
XMRP	1018.7000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - PITCH, N(PM)

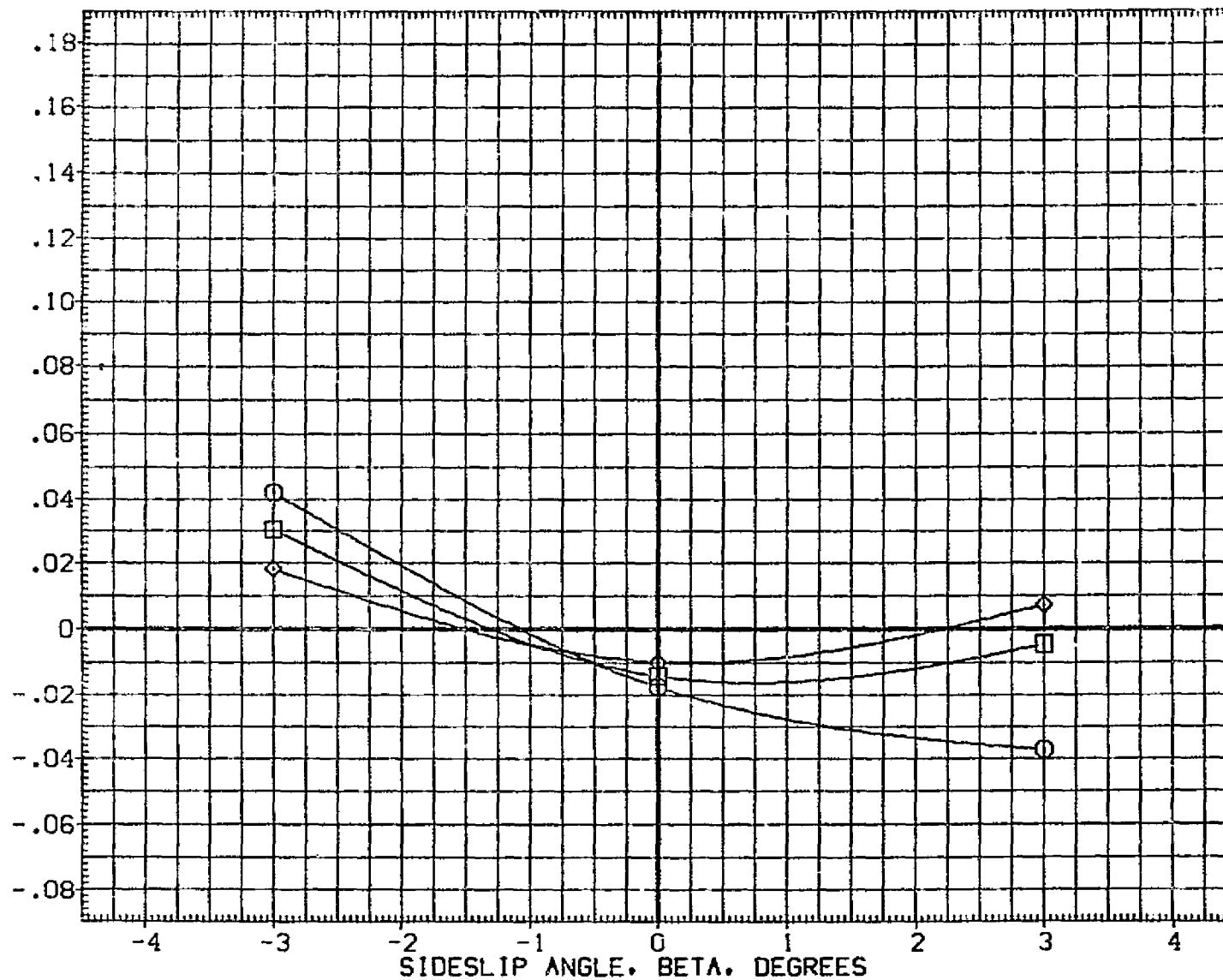


FIGURE 88. AMPLIFICATION FACTOR IN YAW, N51 JETS

01N51

LARC CFHT 118 (MA-22)

(CJA128)

SYMBOL
 ○
 □
 ◇

T/OA-1
 47.500
 95.000
 127.700

MACH
 BDFLAP
 NOJET

PARAMETRIC VALUES
 10.330
 .000
 4.000

ALPHA
 T/OA
 ELEVON

10.000
 190.000
 .000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8000	INCHES
BREF	936.6800	INCHES
XMRP	1075.7000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - PITCH, N(PM)

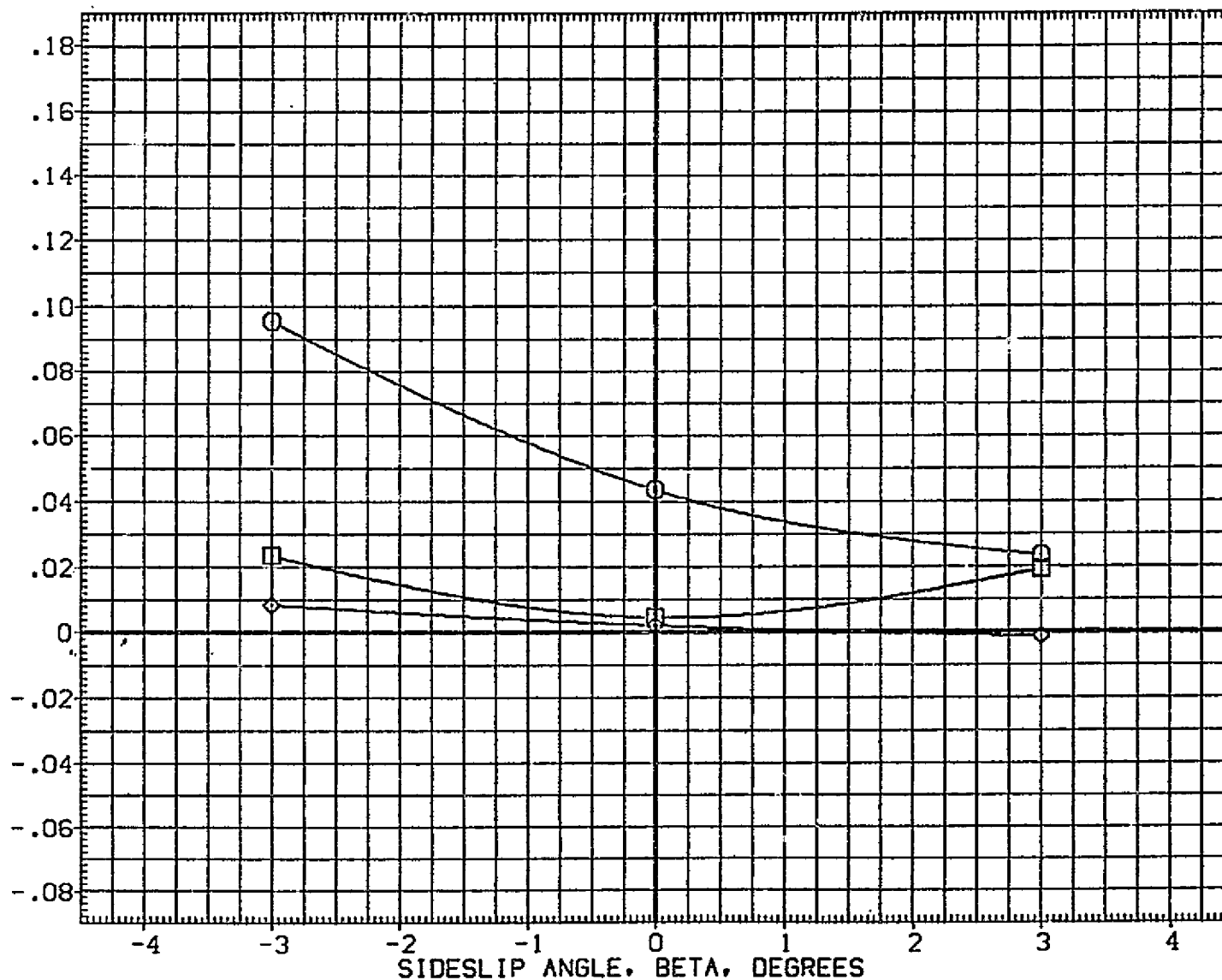


FIGURE 88. AMPLIFICATION FACTOR IN YAW, N51 JETS

SYMBOL



T/OA-1

MACH

PARAMETRIC VALUES

10.330

ALPHA

20.000

80FLAP

.000

T/OA

190.000

NO.JET

1.000

ELEVON

.000

REFERENCE INFORMATION

SREF

2690.0000

SQ.FT.

LREF

474.6000

INCHES

BREF

936.6800

IN. X3

XMRP

1076.7000

IN. Y0

YMRP

.0000

IN. Z0

ZMRP

375.0000

SCALE

.0100

RCS JET AMPLIFICATION FACTOR - PITCH, N(PM)

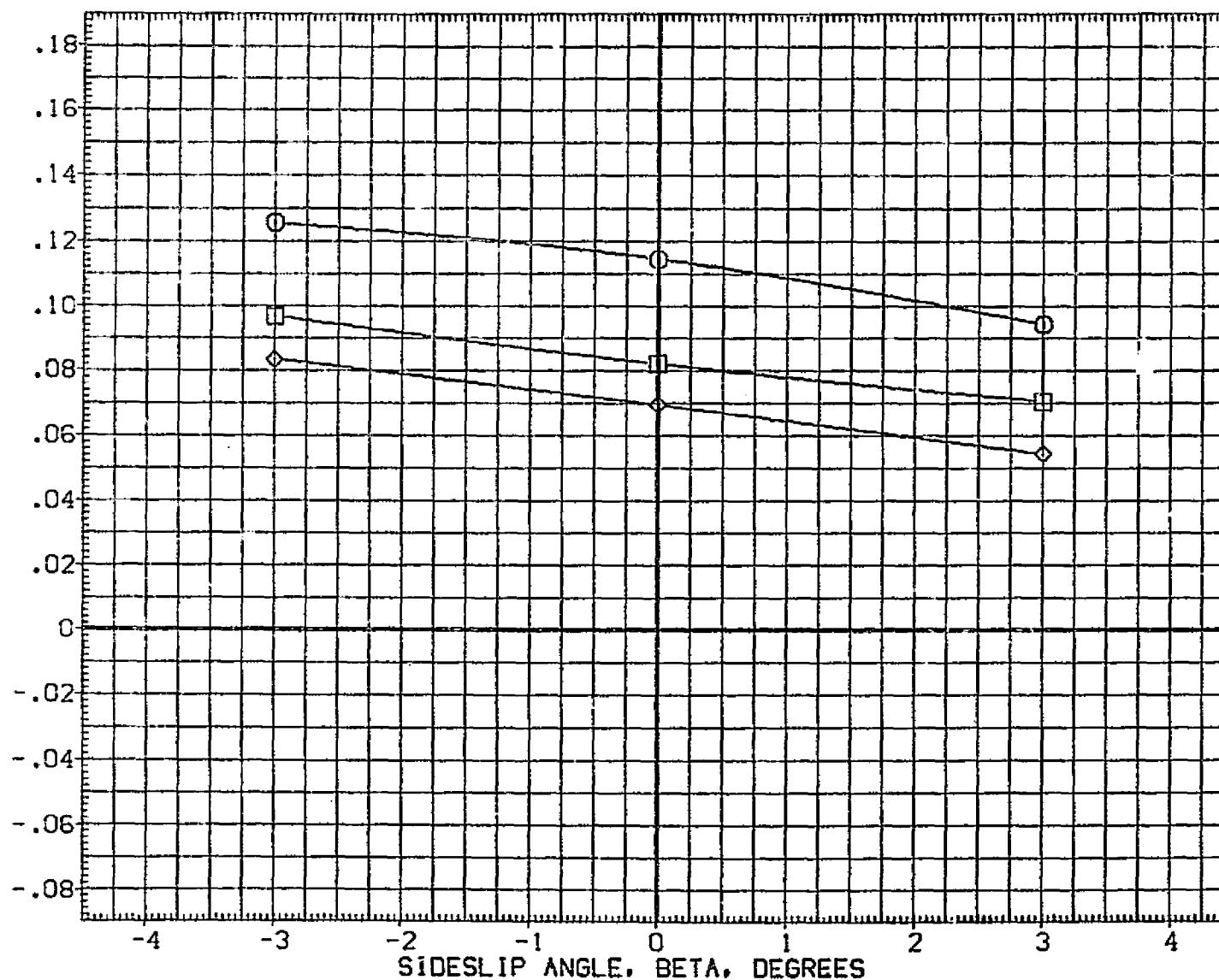


FIGURE 88. AMPLIFICATION FACTOR IN YAW, N51 JETS

01N51

LARC CFHT 118 (MA-22)

(CJA128)

SYMBOL	T/OA-1	PARAMETRIC VALUES
○	47.500	MACH 10.330 ALPHA 35.000
□	95.000	BDFLAP .000 T/OA 190.000
◇	127.700	NO.JET 4.000 ELEVON .000

REFERENCE INFORMATION		
SREF	2690.0000	50.FT.
LREF	474.8000	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - PITCH, N(PM)

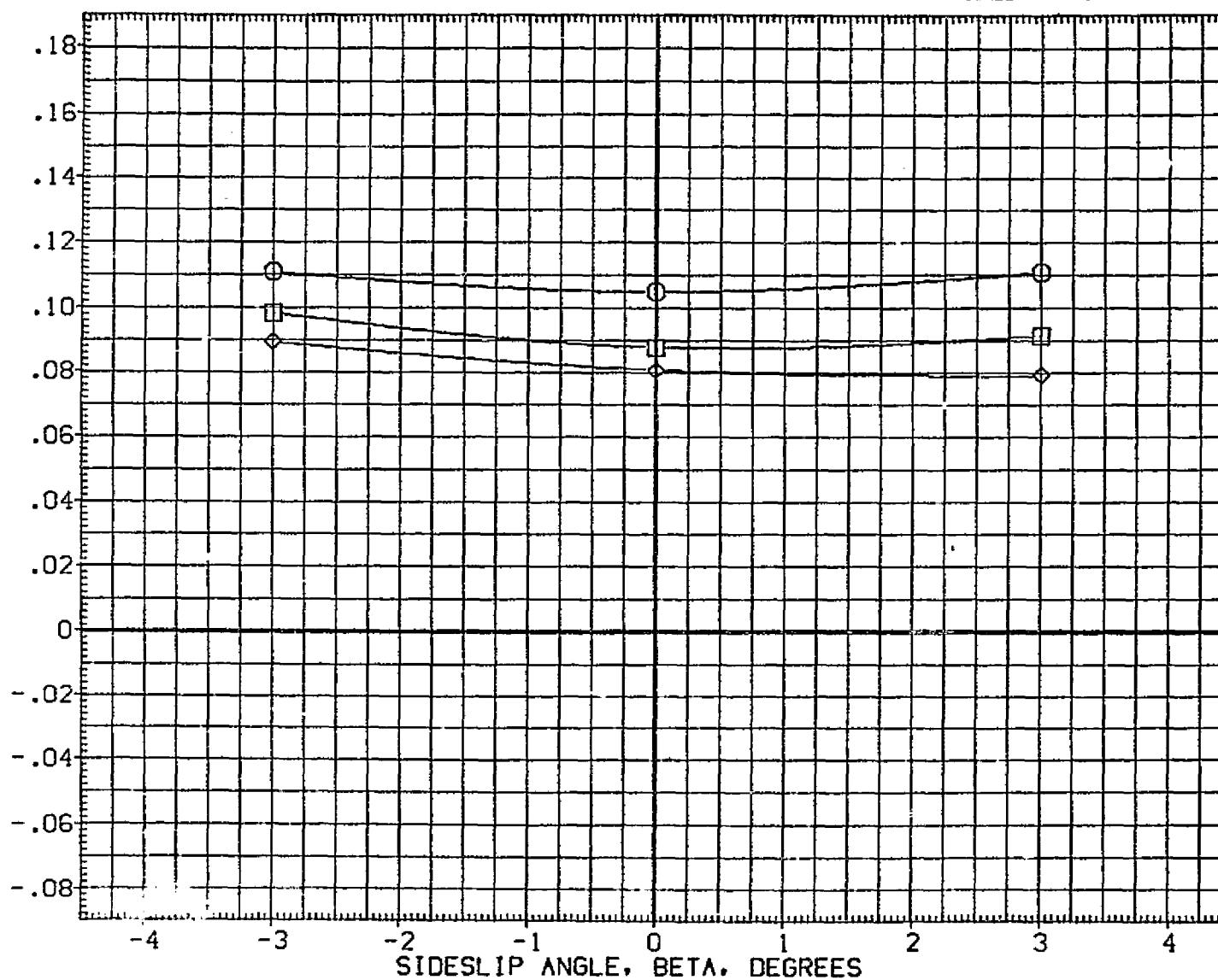


FIGURE 88. AMPLIFICATION FACTOR IN YAW, N51 JETS

SYMBOL	T/QA-1	PARAMETRIC VALUES
○	47.500	MACH 10.330 ALPHA -10.000
□	95.000	BDFLAP .000 T/QA 190.000
◇	127.700	NO JET 4.000 ELEVON .000

REFERENCE INFORMATION	
SREF	2690.0000 SQ.FT.
LREF	474.8000 INCHES
BREF	936.6800 INCHES
XMRP	1076.7000 IN. X0
YMRP	.0000 IN. Y0
ZMRP	375.0000 IN. Z0
SCALE	.0100

RCS JET AMPLIFICATION FACTOR - ROLL, NCRM)

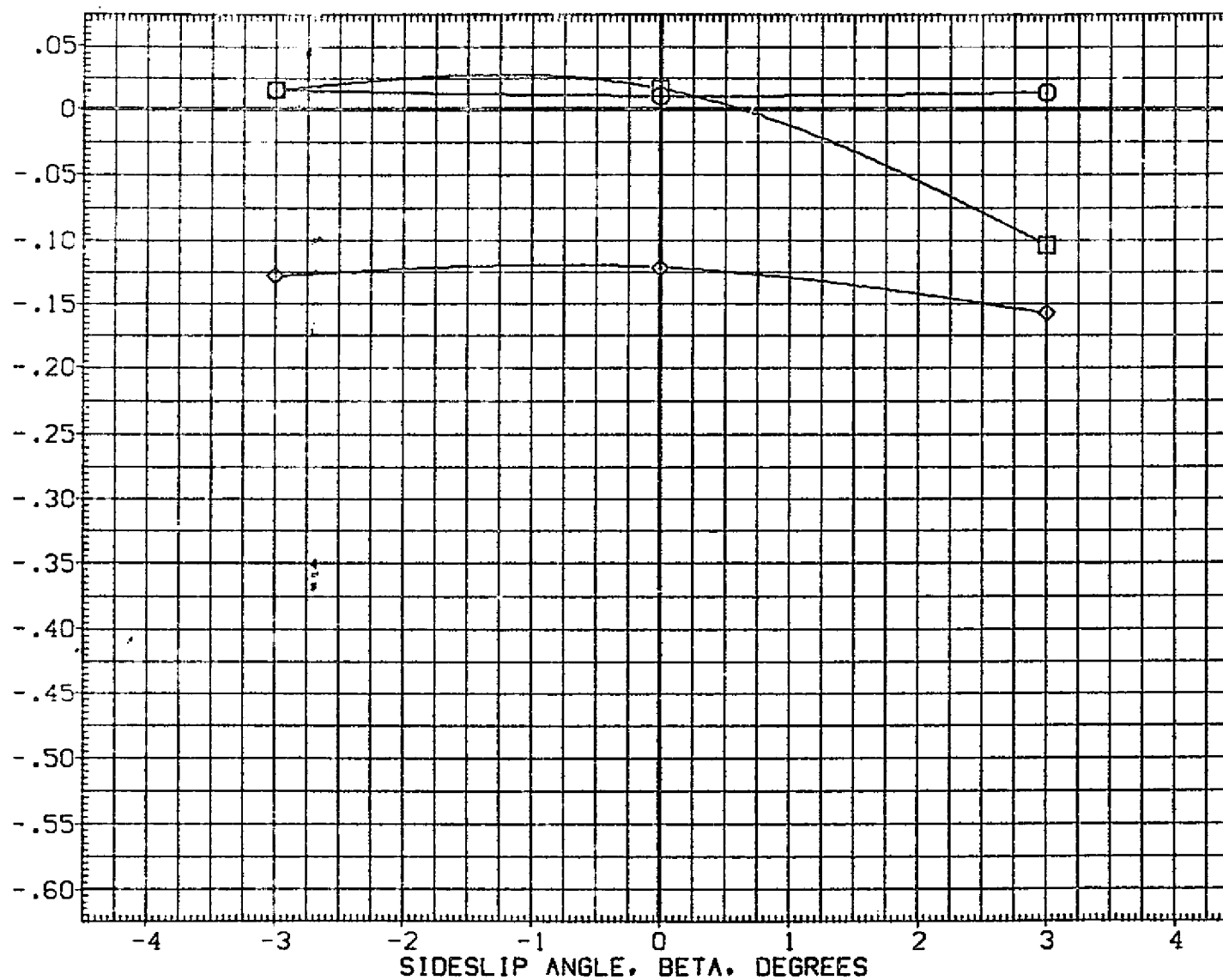


FIGURE 88. AMPLIFICATION FACTOR IN YAW, N51 JETS

GINSI LARC CFHT 118 (MA-22)

(CJA120)

SYMBOL	T/OA-1	MACH	PARAMETRIC VALUES
○	47.500	10.330	ALPHA .000
□	95.000	SDFLAP .000	T/OA 190.000
◇	127.700	NO.JET 4.000	ELEVON .000

REFERENCE INFORMATION		
SREF	2690.0000	50.FT.
LREF	474.8000	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - ROLL, N(RM)

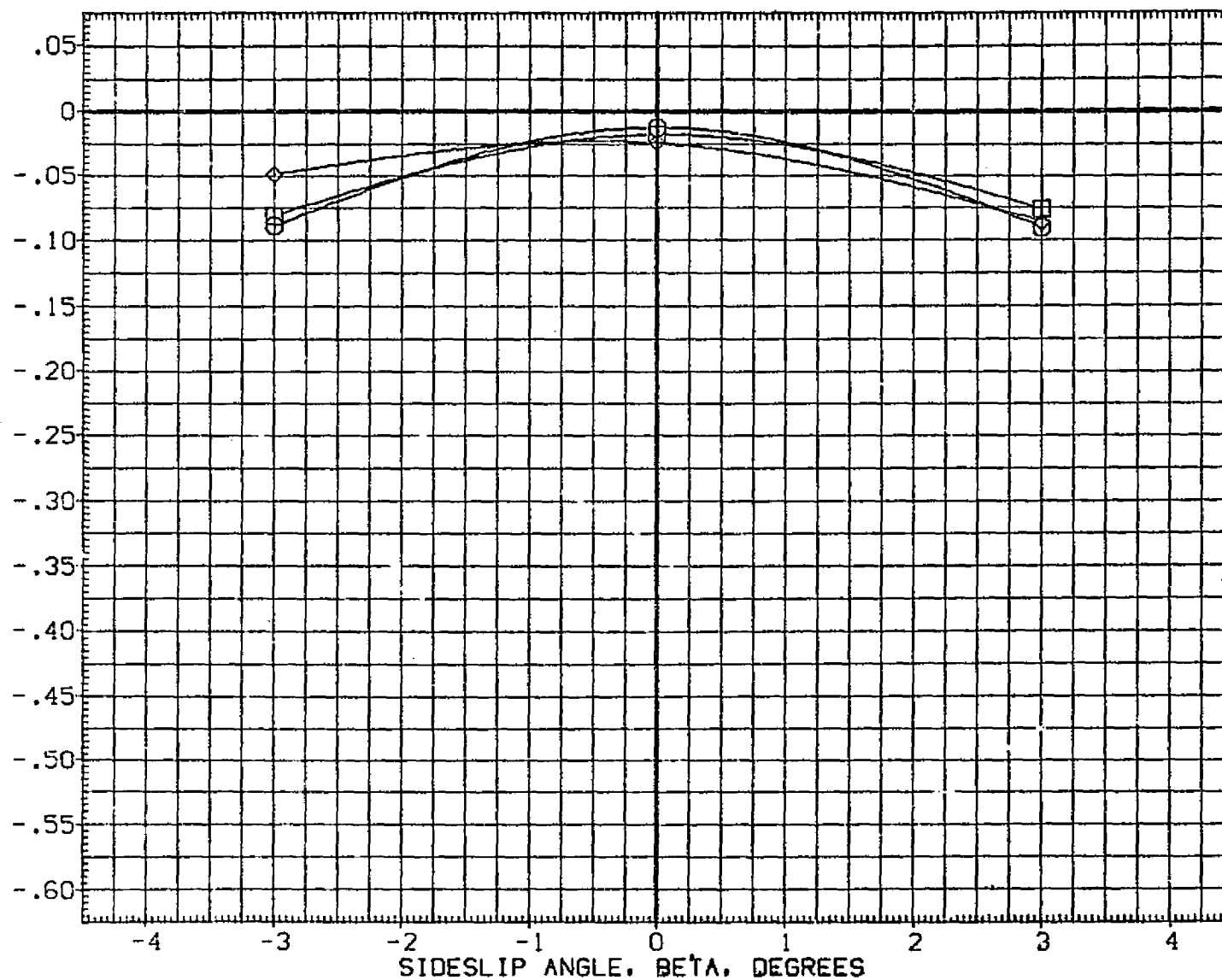


FIGURE 88. AMPLIFICATION FACTOR IN YAW, N51 JETS

SYMBOL	T/OA-1	PARAMETRIC VALUES
○	47.500	MACH 10.330 ALPHA 10.000
□	95.000	BDFLAP .000 T/OA 190.000
◇	127.700	NOJET 4.000 ELEVON .000

REFERENCE INFORMATION		
SREF	2690.0000	50. FT.
LREF	474.9000	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0100	

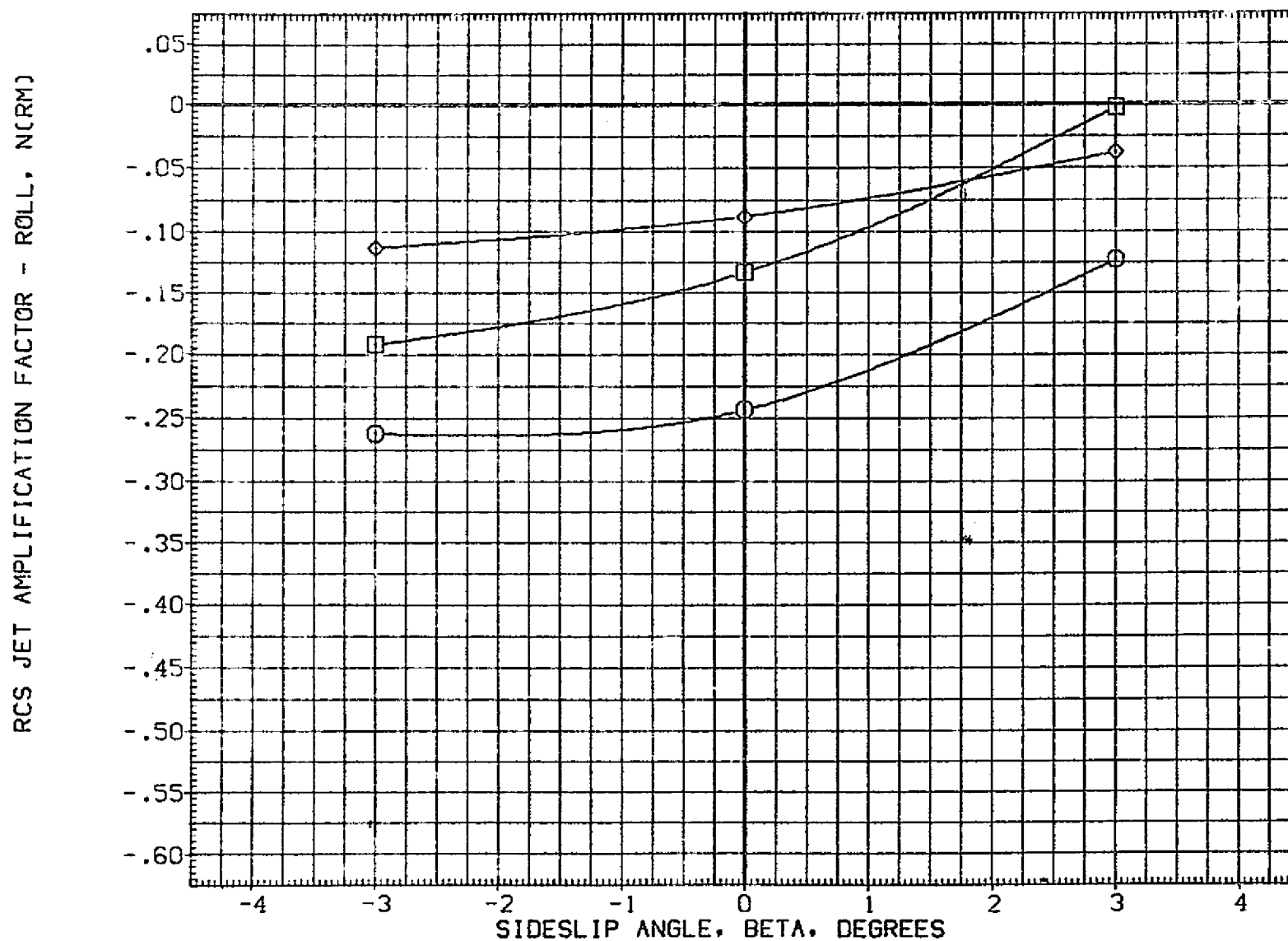


FIGURE 88. AMPLIFICATION FACTOR IN YAW, N51 JETS

01N51

LARC CFHT 118 (MA-22)

(CJA128)

SYMBOL	T/QA-1	MACH	PARAMETRIC VALUES		
○	47.500		10.330	ALPHA	20.000
□	95.000	BDFLAP	.000	T/QA	190.000
◇	127.700	NO.JET	4.000	ELEVON	.000

REFERENCE INFORMATION		
SREF	2690.0000	50.FT.
LREF	474.6000	INCHES
BREF	936.6800	INCHES
XHRP	1076.7000	IN. X0
YHRP	.0000	IN. Y0
ZHRP	375.0000	IN. Z0
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - ROLL, N(RM)

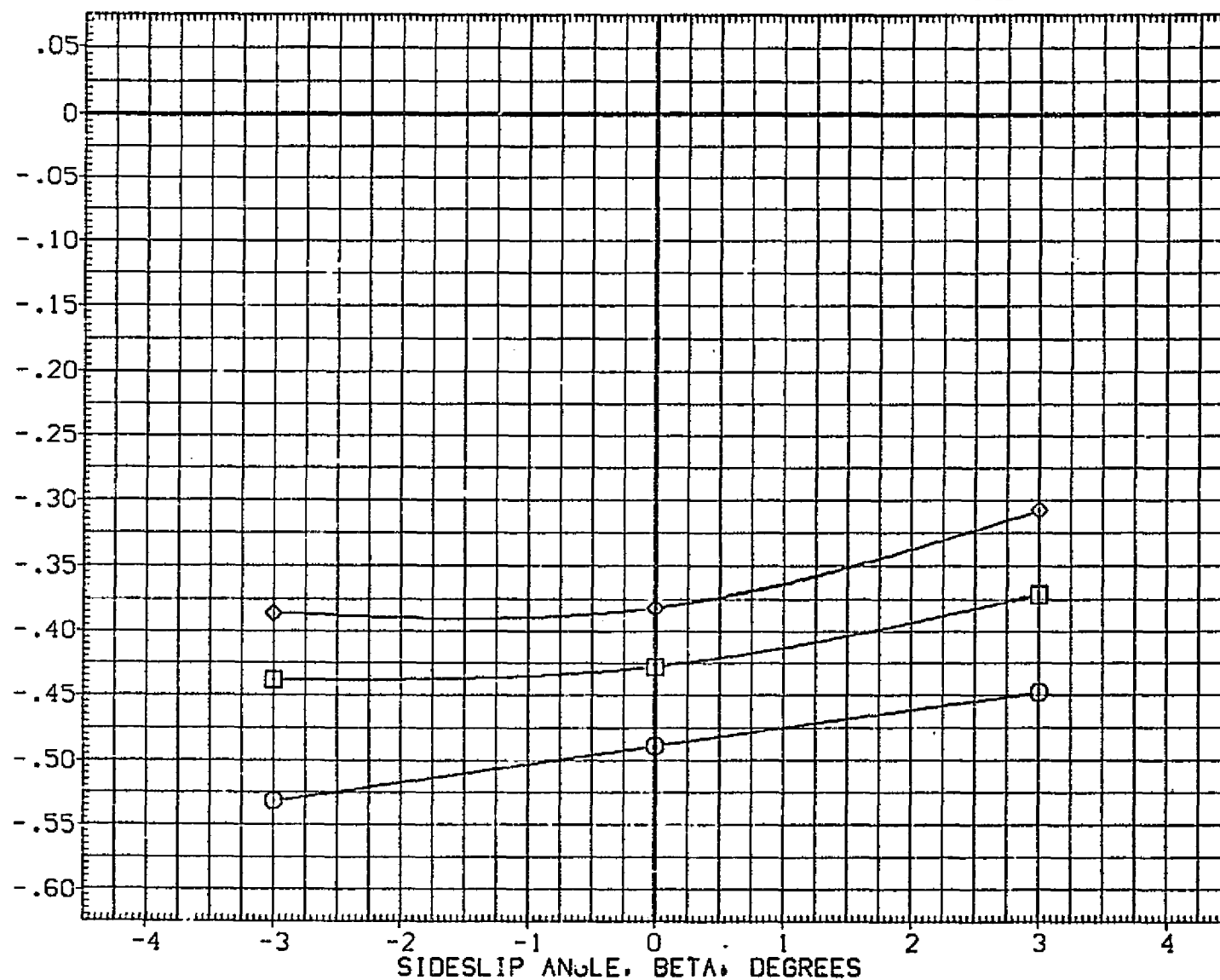


FIGURE 88. AMPLIFICATION FACTOR IN YAW, N51 JETS

SYMBOL	T/QA-1		PARAMETRIC VALUES		
○	47.500	MACH	10.330	ALPHA	35.000
□	95.000	BDFLAP	.000	T/QA	190.000
◇	127.700	NO.JET	4.000	ELEVON	.000

REFERENCE INFORMATION		
SREF	2690.0000	50.87
LREF	474.8000	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0160	

RCS JET AMPLIFICATION FACTOR - ROLL, NCRM

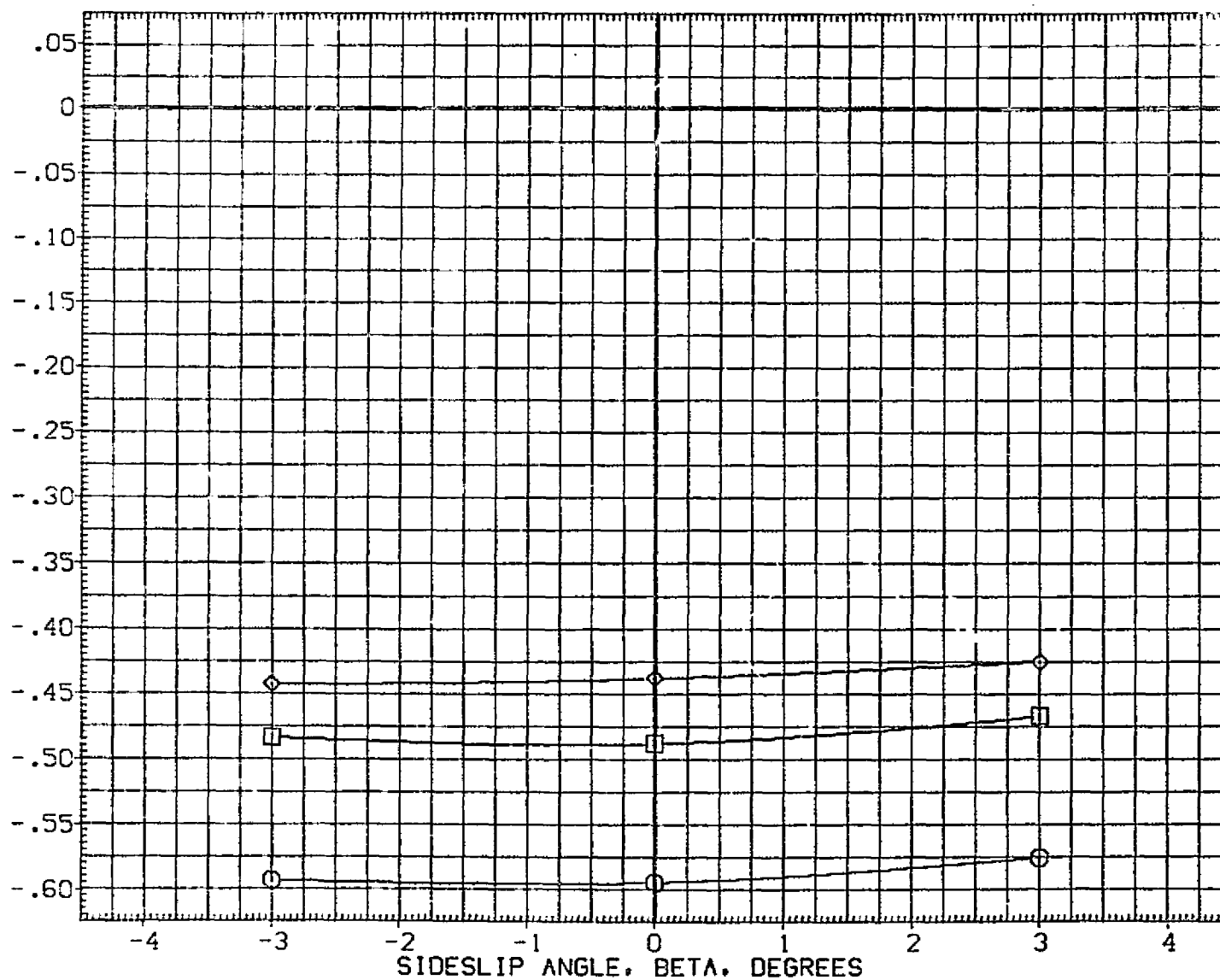


FIGURE 88. AMPLIFICATION FACTOR IN YAW, N51 JETS

01N51

LARC CFHT 118 (MA-22)

(CJA128)

SYMBOL

T/QA-1

PARAMETRIC VALUES

REFERENCE INFORMATION

○

47.500

MACH

10.330

ALPHA

-10.000

SREF

2690.0000

SQ.FT.

□

95.000

BDFLAP

.000

T/QA

190.000

LREF

474.8000

INCHES

◇

127.700

NQ.JET

4.000

ELEVON

.000

BREF

936.6800

INCHES

XMRP

1076.7000

IN. X0

YMRP

.0000

IN. Y0

ZMRP

375.0000

IN. Z0

SCALE

.0100

RCS JET AMPLIFICATION FACTOR - YAW, N(YM)

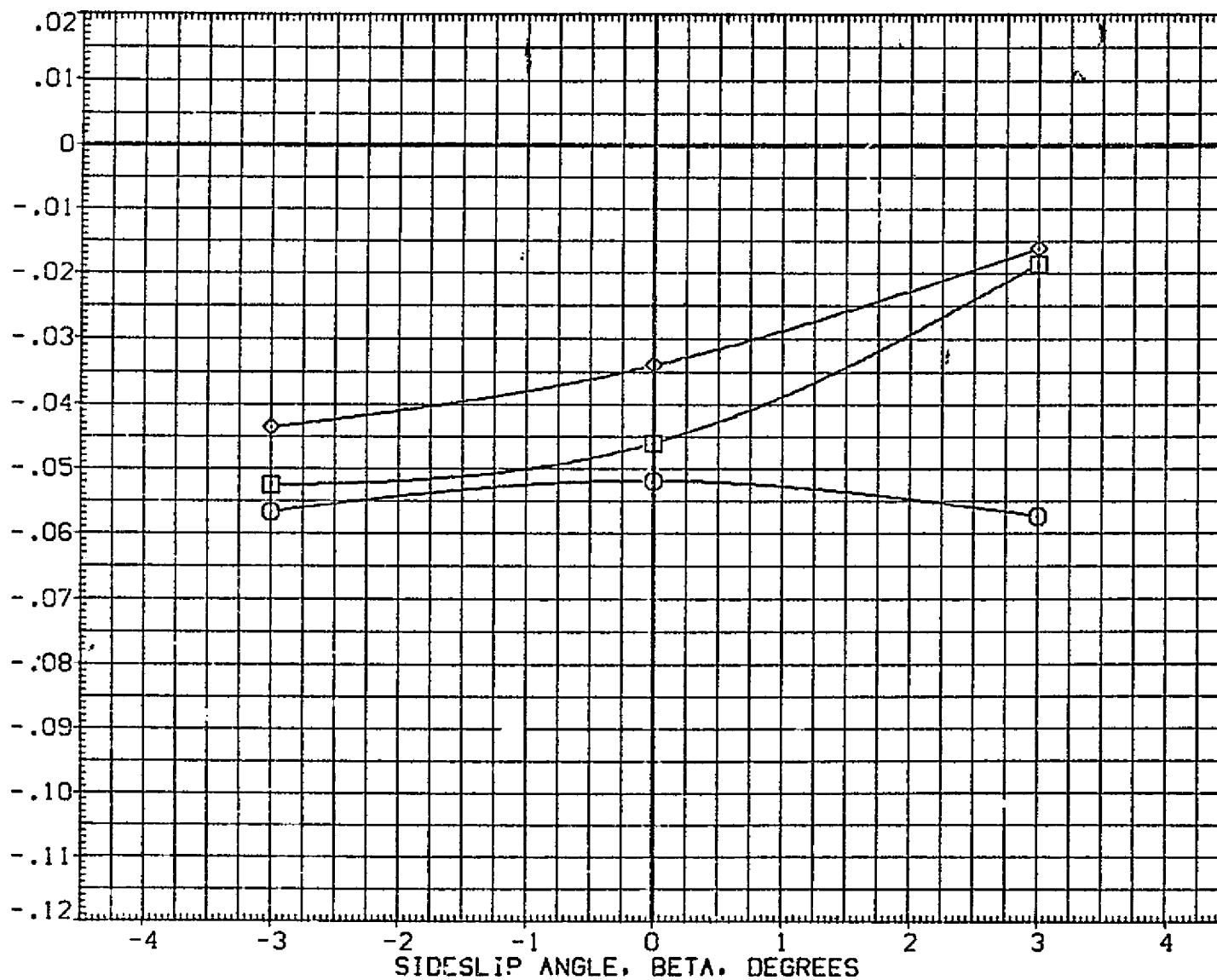


FIGURE 88. AMPLIFICATION FACTOR IN YAW, N51 JETS

SYMBOL	T/OA-1	PARAMETRIC VALUES
○	47.500	MACH 10.330 ALPHA .000
□	95.000	BDFLAP .000 T/OA 190.000
◇	127.700	NOJET 4.000 ELEVON .000

REFERENCE INFORMATION		
SREF	2690.0000	SO. FT.
LREF	474.8000	INCHES
BR F	936.6000	INCHES
XMCP	1076.7000	IN.
YMCP	.0000	IN. Y0
ZMCP	375.0000	IN. Z0
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - YAW, N(CYM)

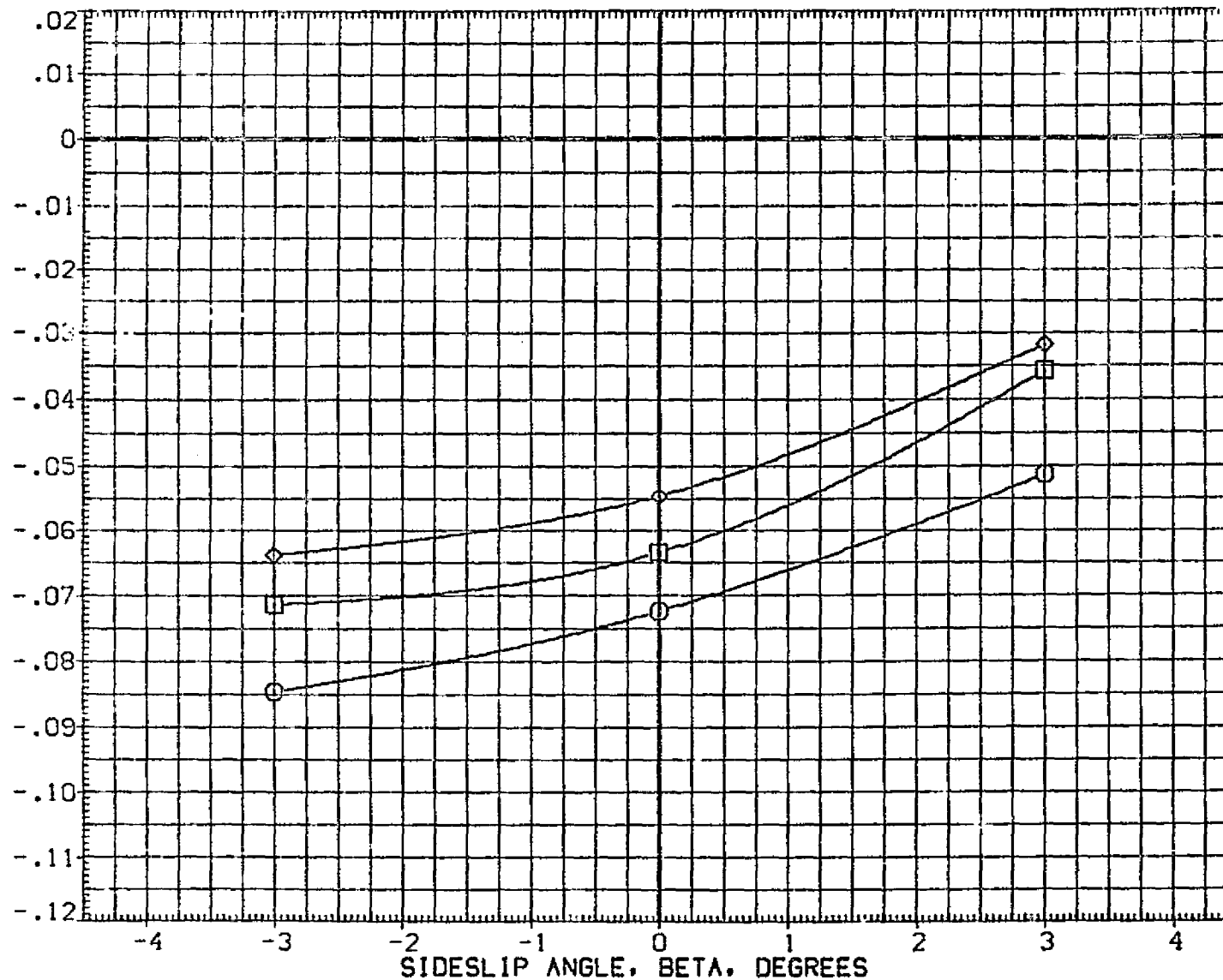


FIGURE 88. AMPLIFICATION FACTOR IN YAW, N51 JETS

01N51

LARC CFHT 118 (MA-22)

(CJA128)

SYMBOL	T/QA-1	PARAMETRIC VALUES
○	47.500	MACH 10.330 ALPHA 10.000
□	95.000	BDFLAP .000 T/QA 190.000
◇	127.700	NO.JET 4.000 ELEVON .000

REFERENCE INFORMATION	
SREF	2690.0000 SQ.FT.
LREF	474.8000 INCHES
BREF	936.6800 INCHES
XMRP	1076.7000 IN. X0
YMRP	.0000 IN. Y0
ZMRP	375.0000 IN. Z0
SCALE	.0100

RCS JET AMPLIFICATION FACTOR - YAW, N(YM)

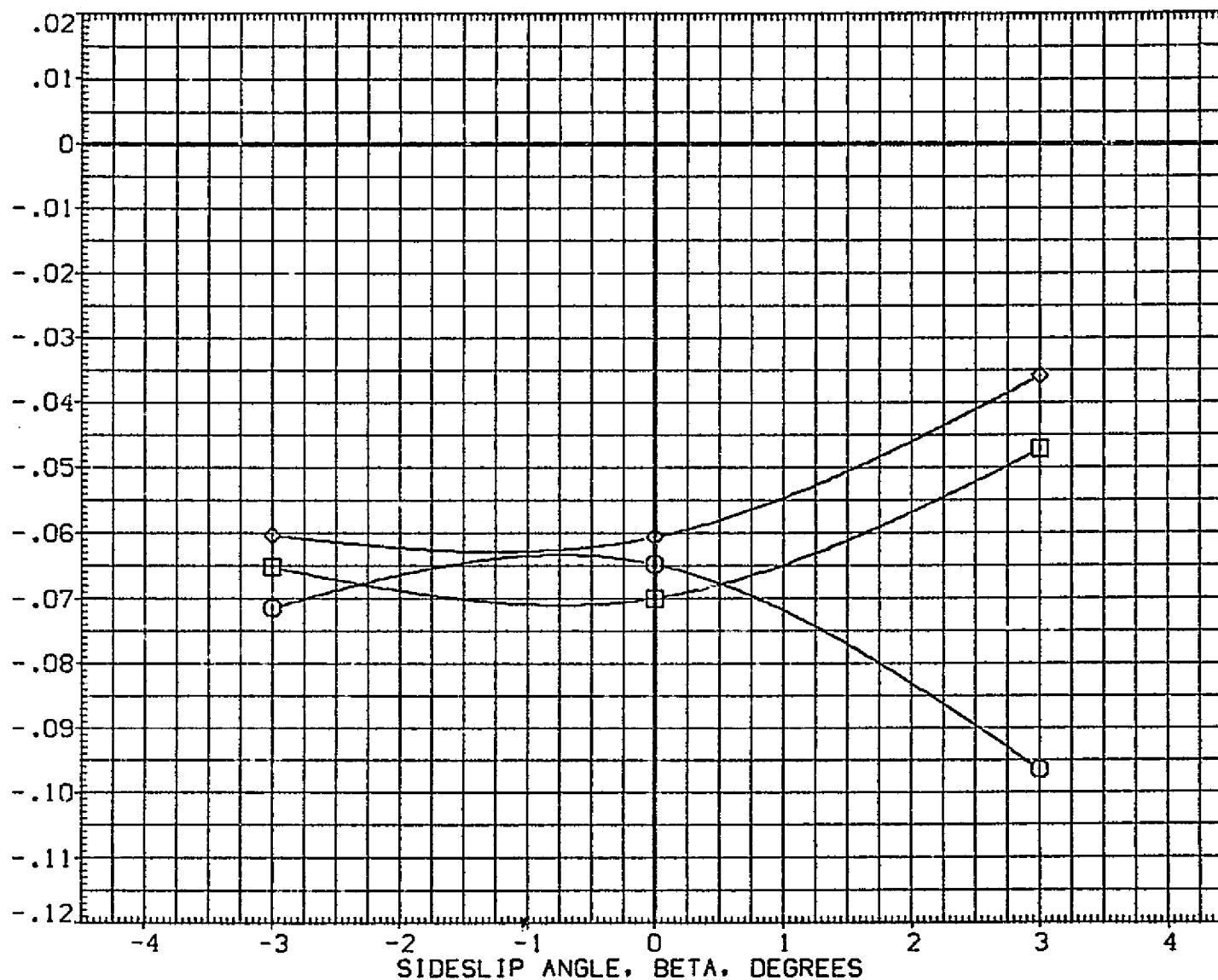


FIGURE 88. AMPLIFICATION FACTOR IN YAW, N51 JETS

SYMBOL

T/OA-1

PARAMETRIC VALUES

○
□
◇

47.500

MACH

10.330

ALPHA

20.000

95.000

BOFLAP

.000

T/OA

190.000

127.700

NO. JET

4.000

ELEVON

.000

REFERENCE INFORMATION

SREF 2600.0000

90.67.

LREF 474.8000

INCHES

BREF 936.6800

INCHES

XMRP 1076.7000

IN. X0

YMRP .0000

IN. Y0

ZMRP 375.0000

IN. Z0

SCALE .0100

RCS JET AMPLIFICATION FACTOR - YAW, N(CYM)

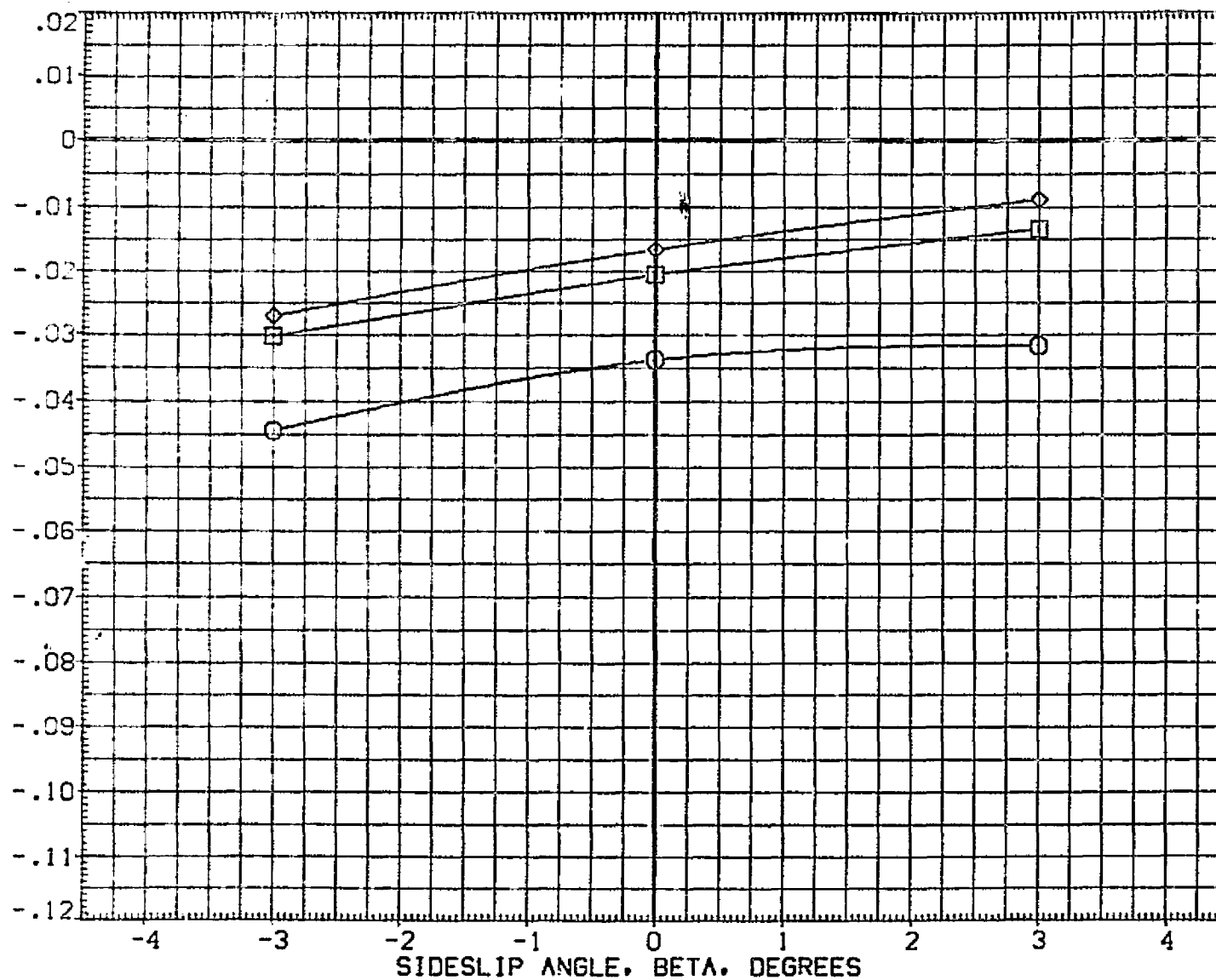


FIGURE 88. AMPLIFICATION FACTOR IN YAW, N51 JETS

01N51

LARC CFHT 118 (MA-22)

(CJA128)

SYMBOL

T/QA-1

PARAMETRIC VALUES

REFERENCE INFORMATION

○
 □
 ◇

47.500

MACH

10.330

ALPHA

35.000

SREF

2690.0000

50. FT.

95.000

BOFLAP

.000

T/QA

190.000

LREF

474.8000

INCHES

127.700

NO. JET

4.000

ELEVON

.000

BREF

936.6800

INCHES

XMRP

1076.7000

IN. X0

YMRP

.0000

IN. Y0

ZMRP

375.0000

IN. Z0

SCALE

.0100

RCS JET AMPLIFICATION FACTOR - YAW, N(°)

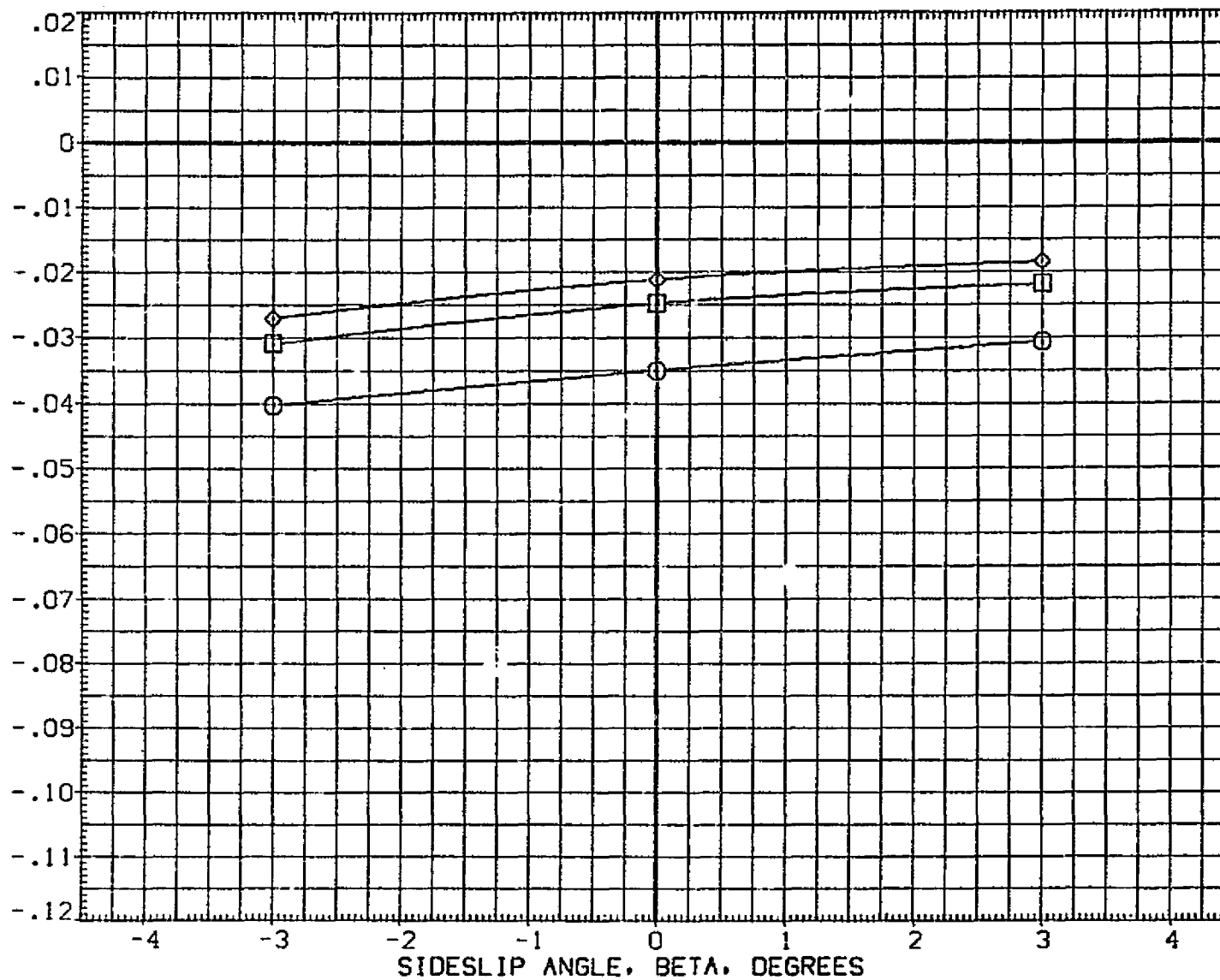


FIGURE 88. AMPLIFICATION FACTOR IN YAW, N51 JETS

SYMBOL	T/OA-I		PARAMETRIC VALUES	
○	47.500	MACH	10.330	ALPHA -10.000
□	95.000	BDFLAP	.000	T/OA 190.000
◇	127.700	NO.JET	4.000	ELEVON .000

REFERENCE INFORMATION		
SREF	2630.0000	IN. FT.
LREF	474.8000	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0100	

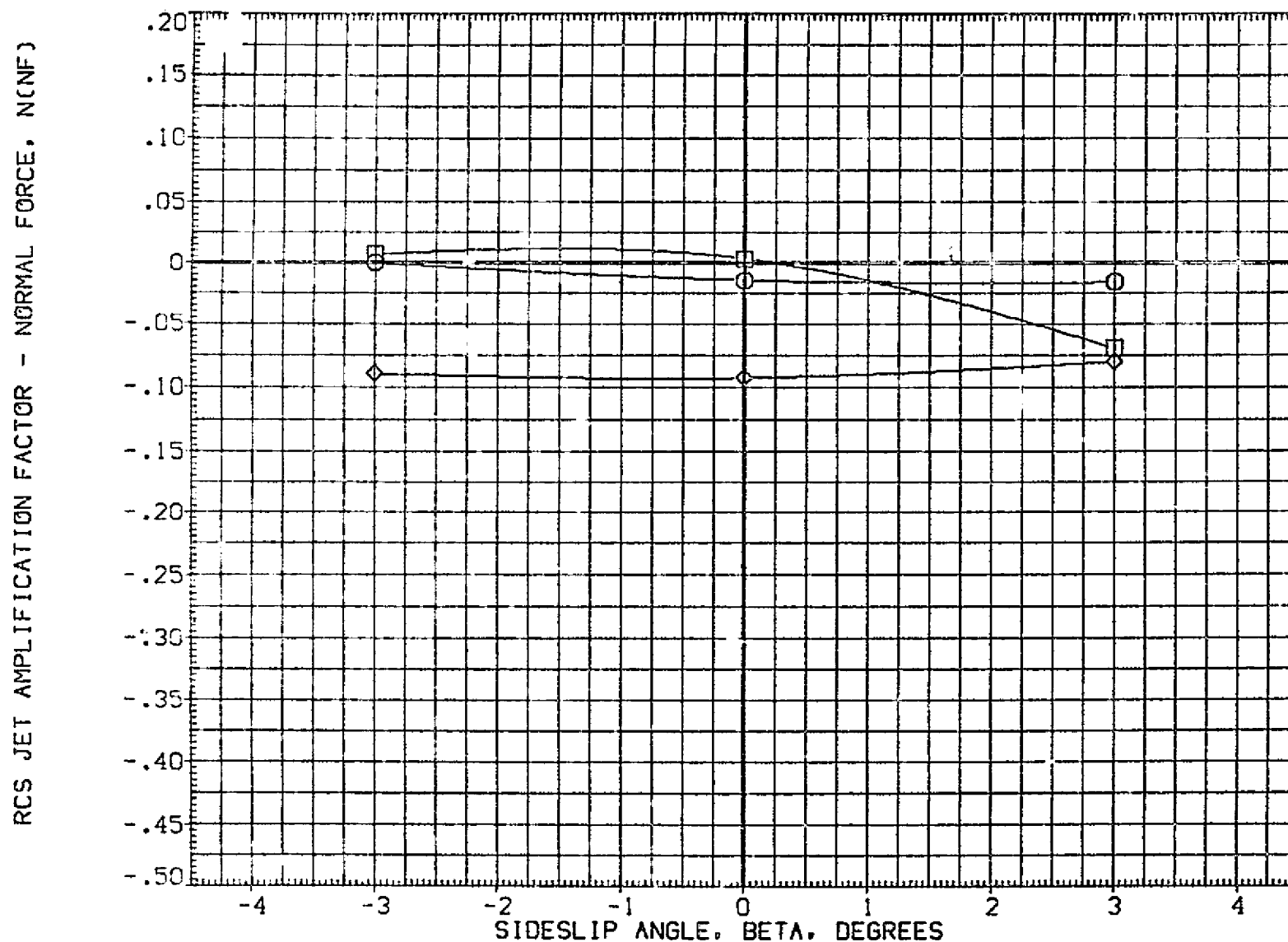


FIGURE 88. AMPLIFICATION FACTOR IN YAW, N51 JETS

01N51

LARC CFHT 118 (MA-22)

(CJA128)

SYMBOL	T/QA-1	MACH	PARAMETRIC VALUES	ALPHA	T/QA	ELEVON
○	47.500	10.330	.000			
□	95.000	.000	190.000			
◇	127.700	NO.JET	4.000			

REFERENCE INFORMATION		
SREF	2690.0000	50.FT.
LREF	474.8000	INCHES
BREF	936.6000	INCHES
XMRP	1076.7000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - NORMAL FORCE, N(NF)

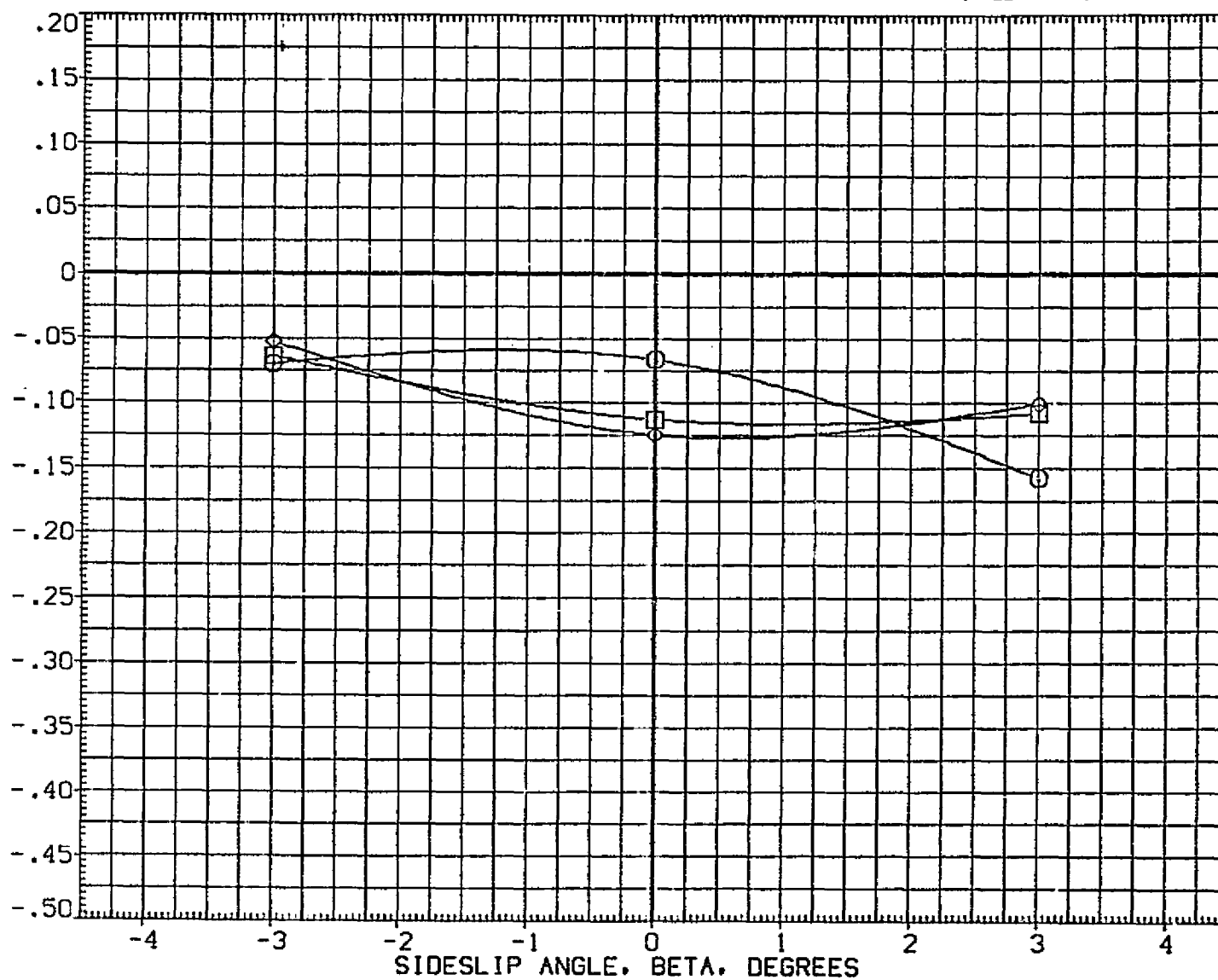


FIGURE 88. AMPLIFICATION FACTOR IN YAW, N51 JETS

SYMBOL	T/QA-1	PARAMETRIC VALUES
○	47.500	MACH 10.330 ALPHA 10.000
□	95.000	BOFLAP .000 T/QA 190.000
◇	127.700	NO JET 4.000 ELEVON .000

REFERENCE INFORMATION		
SREF	2690.0000	50.FT.
LREF	474.8000	INCHES
BREF	936.6800	INCHES
YMRP	1076.7000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0100	

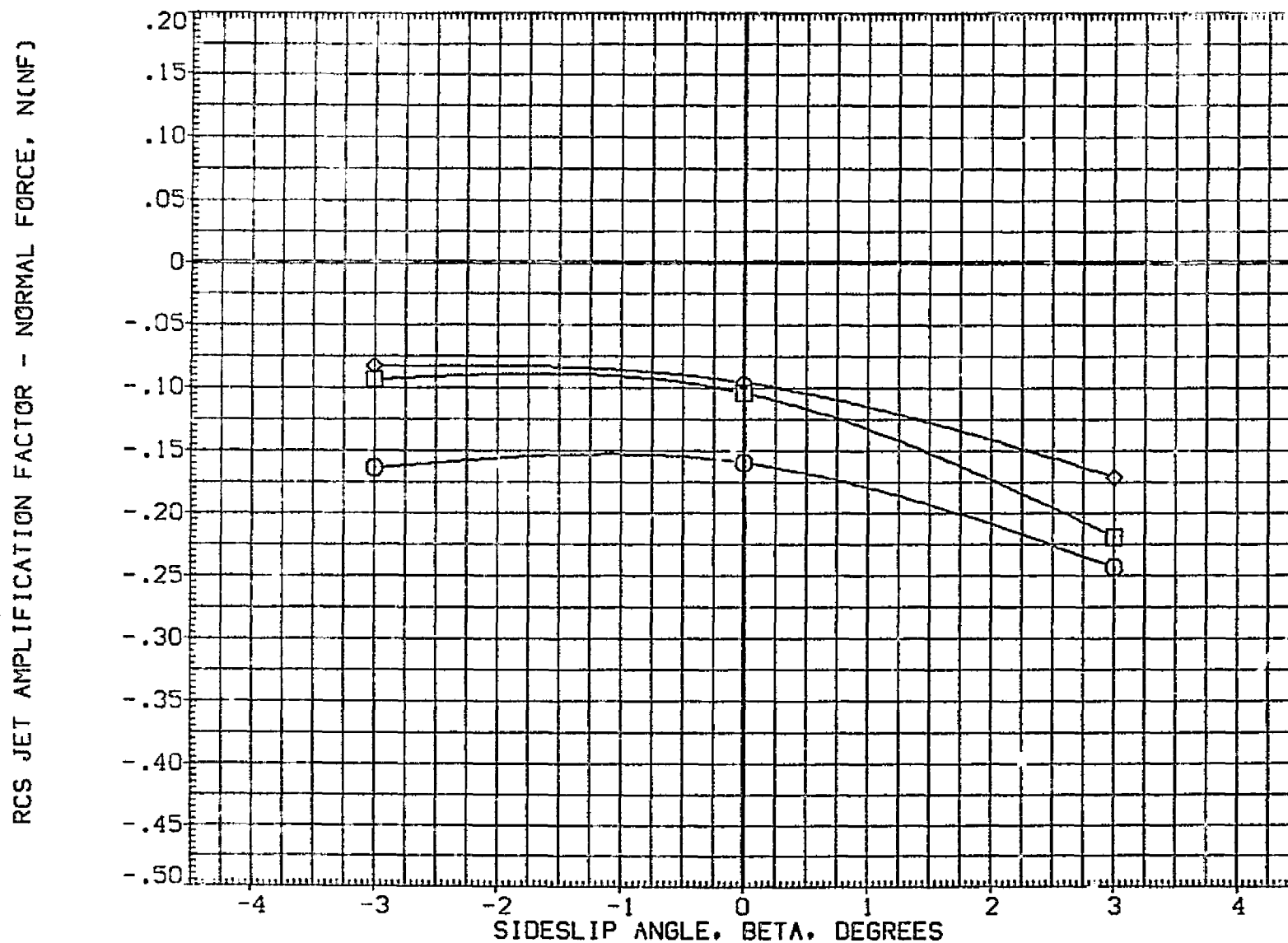


FIGURE 88. AMPLIFICATION FACTOR IN YAW, N51 JETS

01N51

LARC CFHT 118 (MA-22)

(CJA128)

SYMBOL

T/OA-1

PARAMETRIC VALUES

REFERENCE INFORMATION

○
□
◇

47.500
95.000
127.700

MACH
BDFLAP
NO.JET

10.330
.000
4.000

ALPHA
T/OA
ELEVON

20.000
190.000
.000

SREF 2690.0000
LREF 474.8000
BREF 936.6800
XMRP 1076.7000
YMRP .0000
ZMRP 375.0000
SCALE .0100

50.FT.
INCHES
INCHES
IN. X0
IN. Y0
IN. Z0

RCS JET AMPLIFICATION FACTOR - NORMAL FORCE, N(NF)

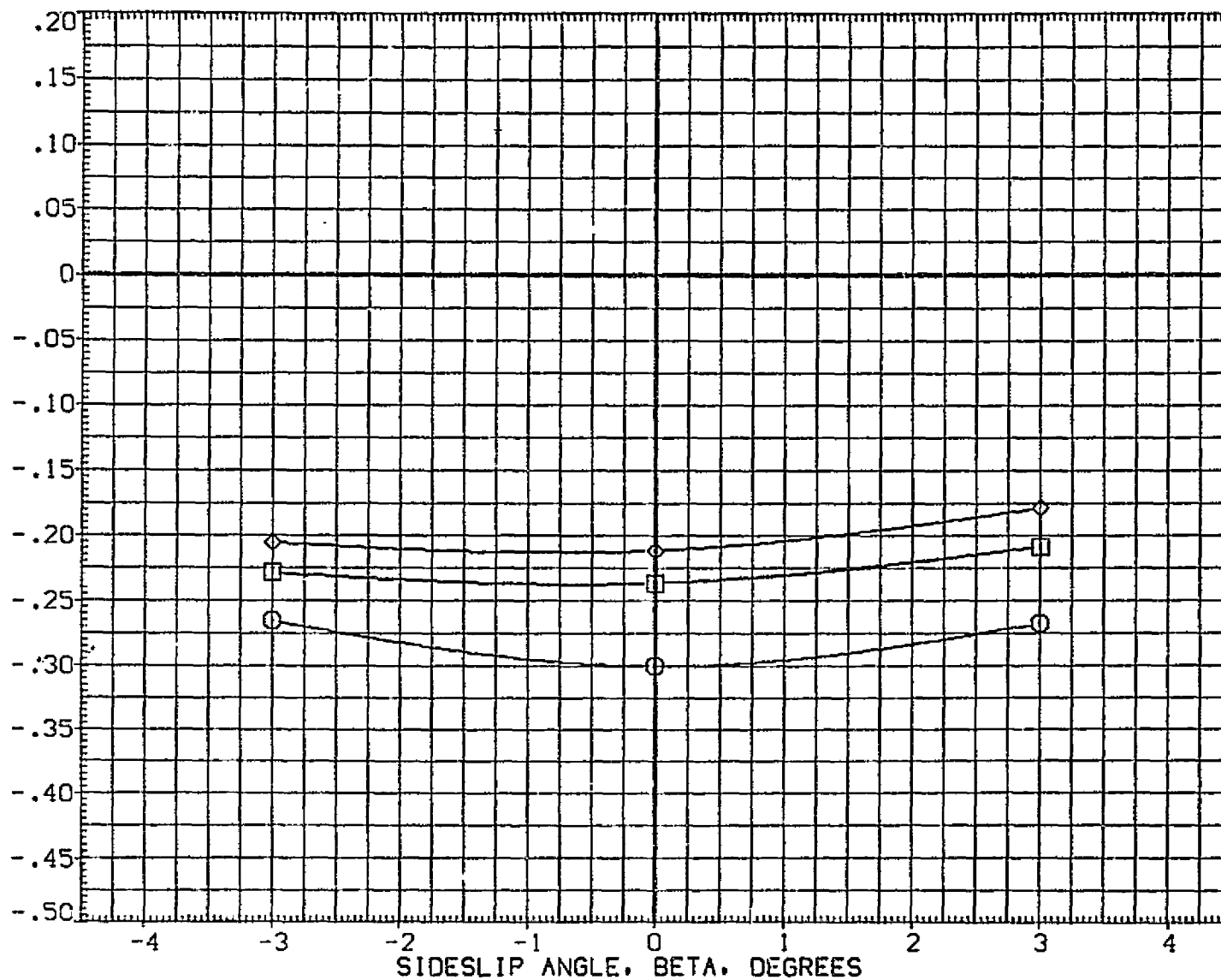


FIGURE 88. AMPLIFICATION FACTOR IN YAW, N51 JETS

SYMBOL	T/OA-1	PARAMETRIC VALUES
○	47.500	MACH 10.330 ALPHA 35.000
□	95.000	BOFLAP .000 T/OA 190.000
◇	127.700	NO JET 4.000 ELEVON .000

REFERENCE INFORMATION		
SREF	2690.0000	IN. Y0
LREF	174.8000	IN. X0
BREF	936.6800	IN. Y0
ZREF	1076.7000	IN. Z0
ZPRP	.0000	
ZPRP	375.0000	
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - NORMAL FORCE, N(NF)

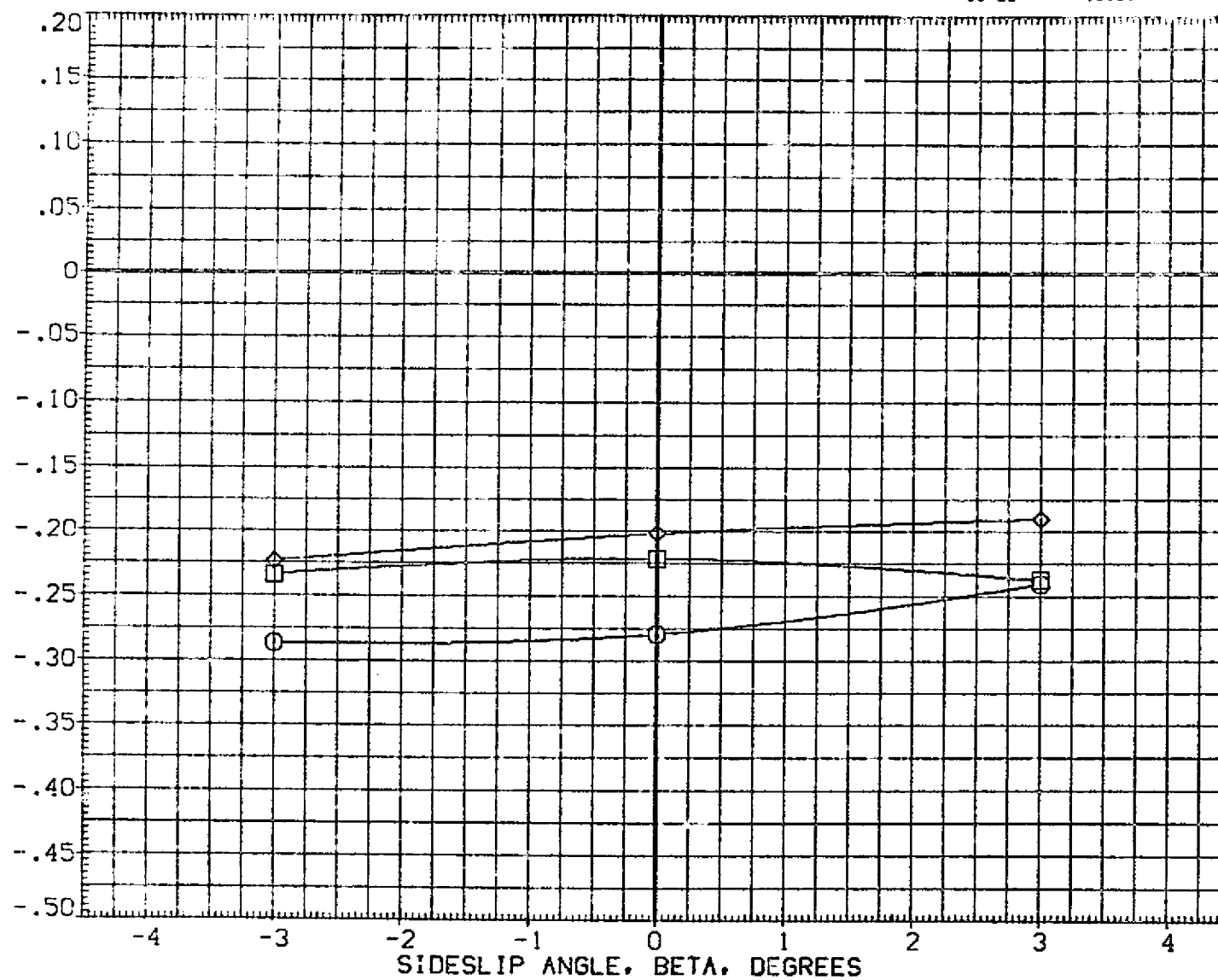


FIGURE 88. AMPLIFICATION FACTOR IN YAW, N51 JETS

01N51

LARC CFHT 118 (MA-22)

(CJA128)

SYMBOL	T/OA-1	MACH	PARAMETRIC VALUES		
○	47.500		10.330	ALPHA	-10.000
□	95.000	BDFLAP	.000	T/OA	190.000
◇	127.700	NO JET	4.000	ELEVON	.000

REFERENCE INFORMATION		
SREF	2690.0000	50.FT.
LREF	474.8000	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - AXIAL FORCE, N(AF)

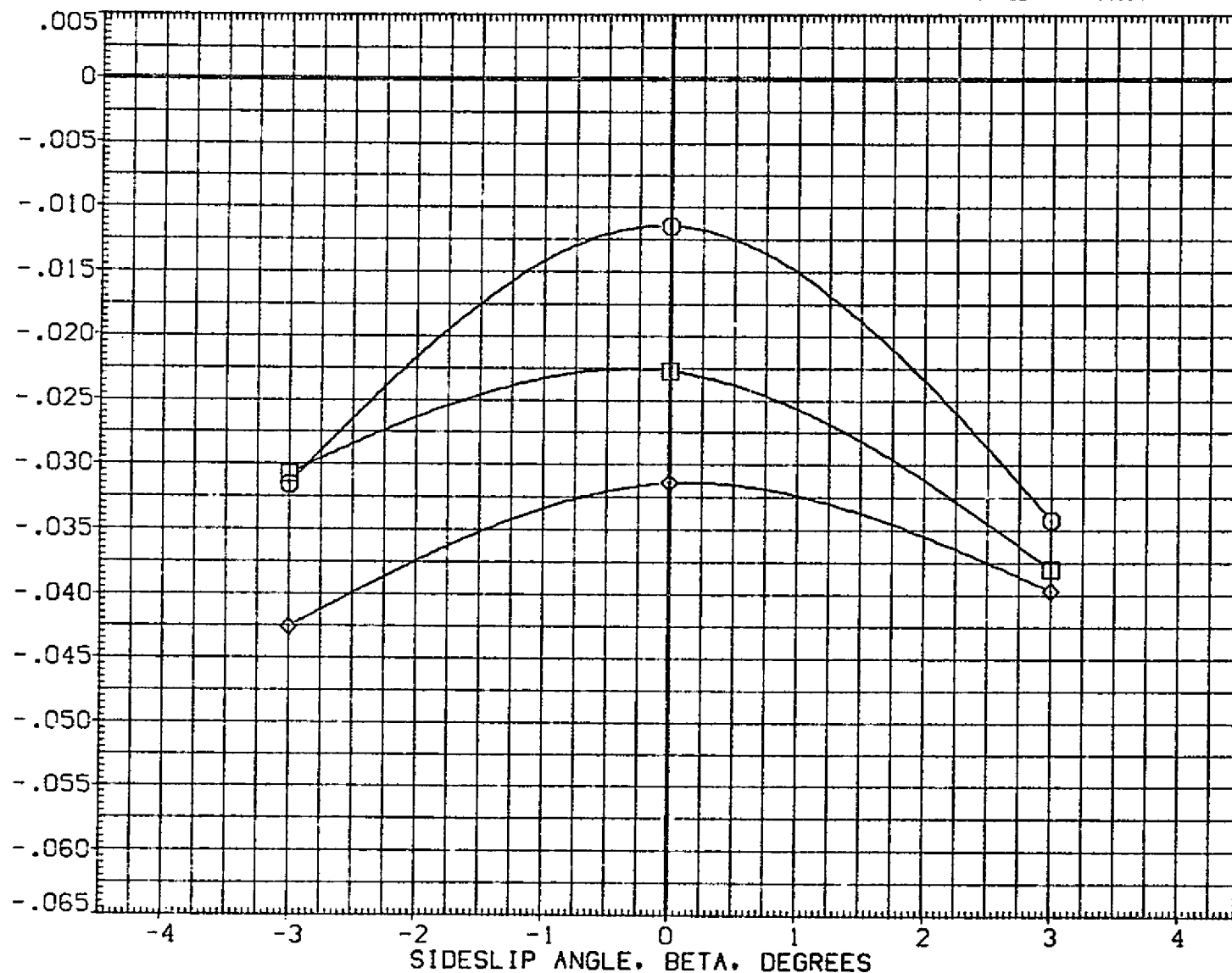


FIGURE 88. AMPLIFICATION FACTOR IN YAW, N51 JETS

SYMBOL	T/QA-1	PARAMETRIC VALUES
○	47.500	MACH 10.330 ALPHA .000
□	95.000	BDPLAP .000 T/QA 190.000
◇	127.700	NO. JET 4.000 ELEVON .000

REFERENCE INFORMATION	
SREF	2690.0000
LREF	474.8000
BREF	936.6800
XMRP	1076.7000
YMRP	.0000
ZMRP	375.0000
SCALE	.0100

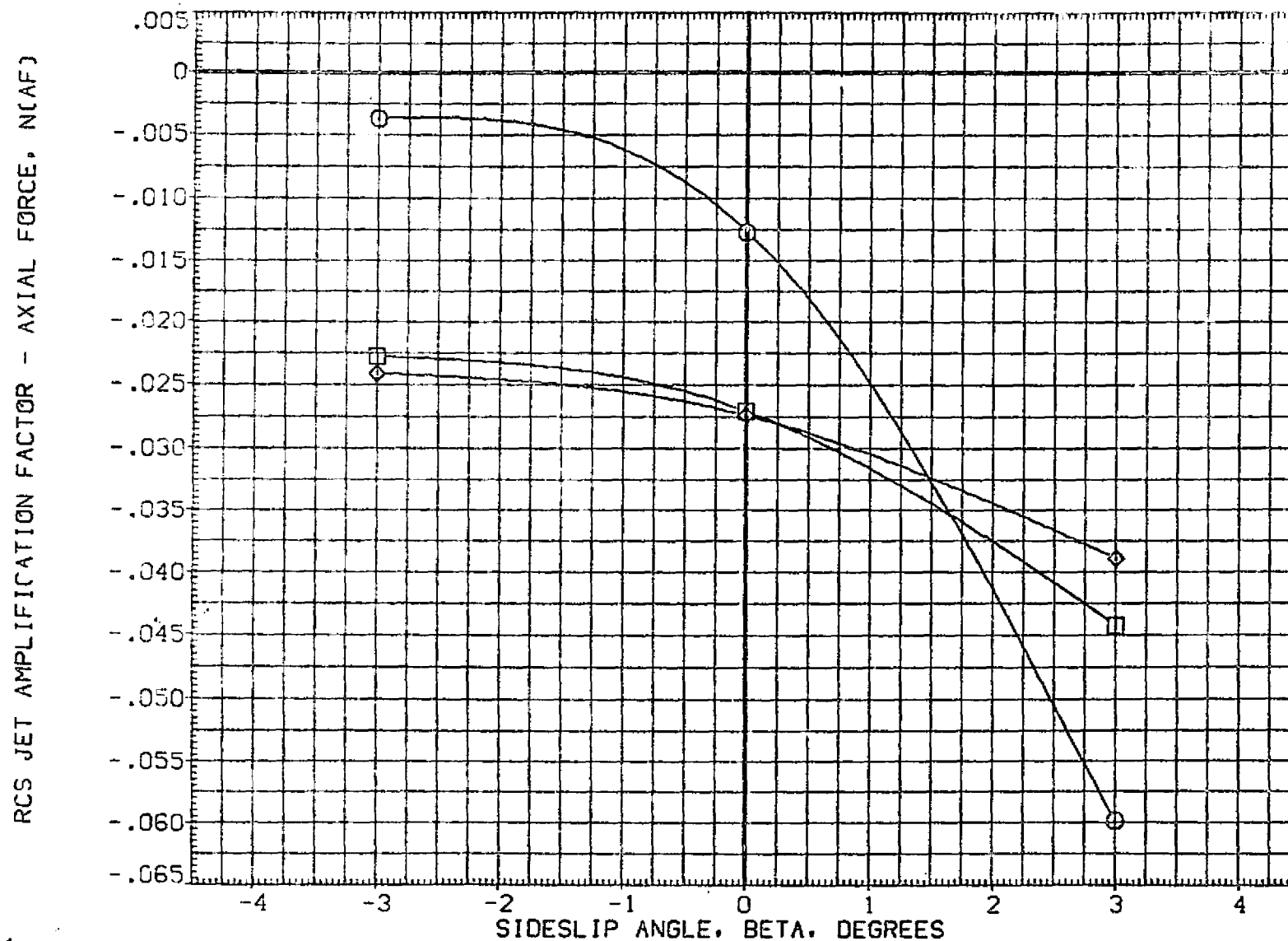


FIGURE 88. AMPLIFICATION FACTOR IN YAW, N51 JETS

01N51

LARC CFHT 118 (MA-22)

(CJA128)

SYMBOL	T/QA-1	PARAMETRIC VALUES
○	47.500	MACH 10.330 ALPHA 10.000
□	95.000	BOFLAP .000 T/QA 190.000
◇	127.700	NO.JET 4.000 ELEVON .000

REFERENCE INFORMATION	
SREF	2690.0000 SQ.FT.
LREF	474.8000 INCHES
BREF	936.6800 INCHES
XMRP	1076.7000 IN. X0
YMRP	.0000 IN. Y0
ZMRP	375.0000 IN. Z0
SCALE	.0100

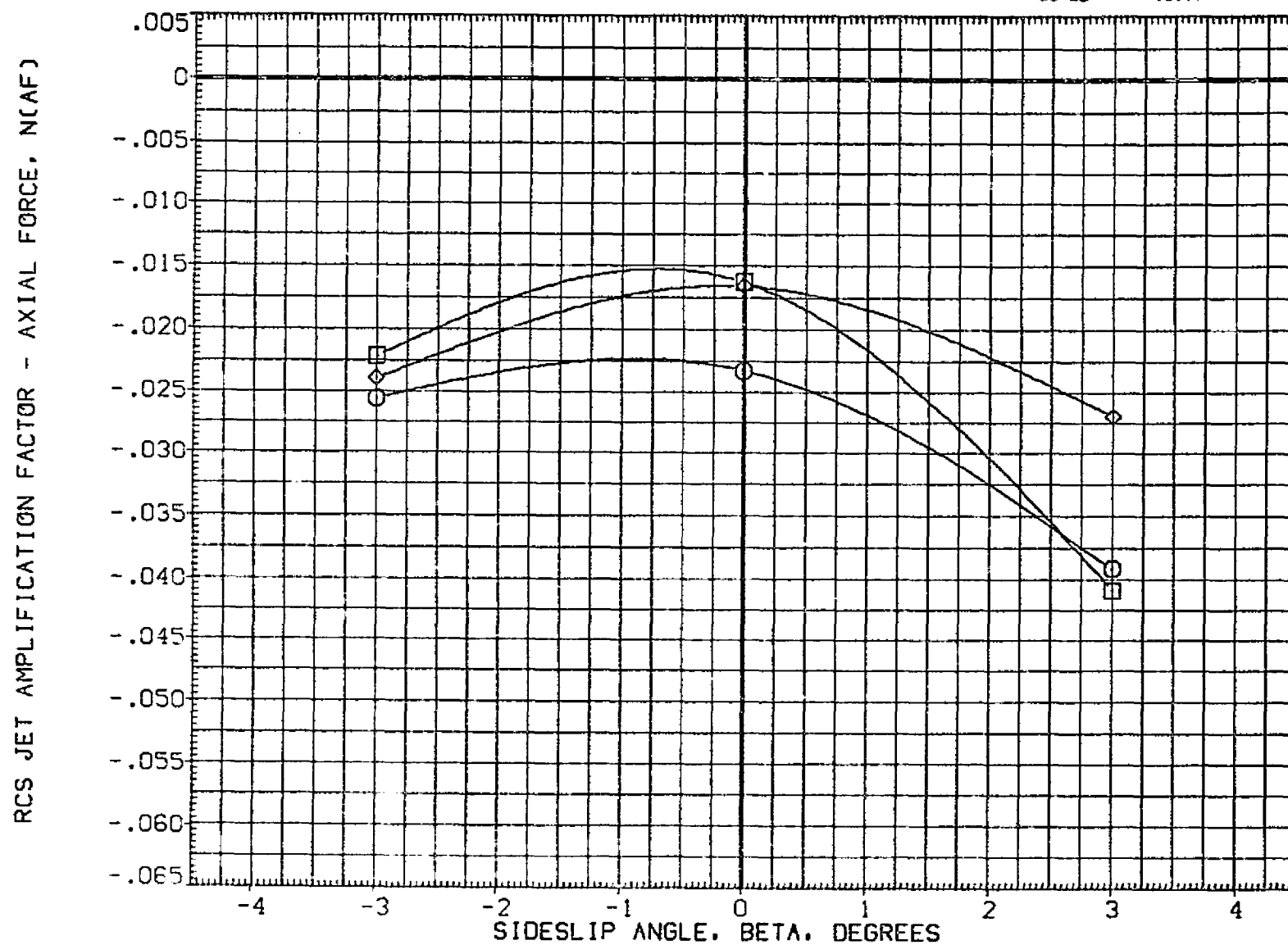


FIGURE 88. AMPLIFICATION FACTOR IN YAW, N51 JETS

SYMBOL	T/OA-1	PARAMETRIC VALUES
○	47.500	MACH 10.330 ALPHA 20.000
□	95.000	BOFLAP .000 T/OA 190.000
△	127.700	NO. JC 4.000 ELEVON .000

REFERENCE INFORMATION	
SREF	2690.0000
LREF	74.8000
B F	336.6800
X P	1076.7000
Y P	.0000
Z P	375.0000
SCALE	.0100

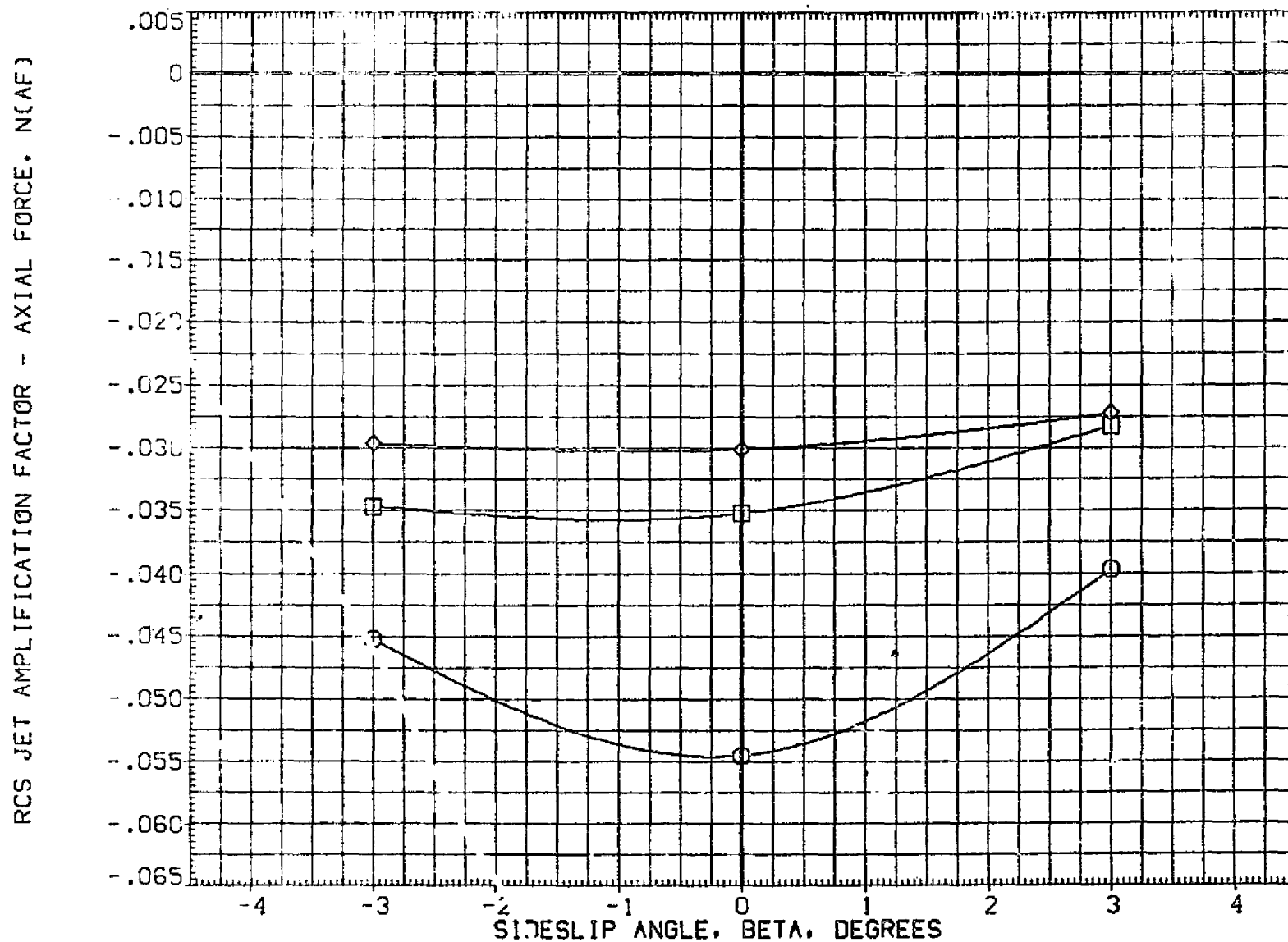


FIGURE 88. AMPLIFICATION FACTOR IN YAW, N51 JETS

01N51

LARC CFHT 118 (MA-22)

(CJA128)

SYMBOL	T/OA-1	PARAMETRIC VALUES
○	47.500	MACH 10.330 ALPHA 35.000
□	95.000	BDFLAP .000 T/OA 190.000
◇	127.700	NOJET 4.000 ELEVON .000

REFERENCE INFORMATION		
SREF	2690.0000	50. FT.
LREF	474.8000	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - AXIAL FORCE, N(AF)

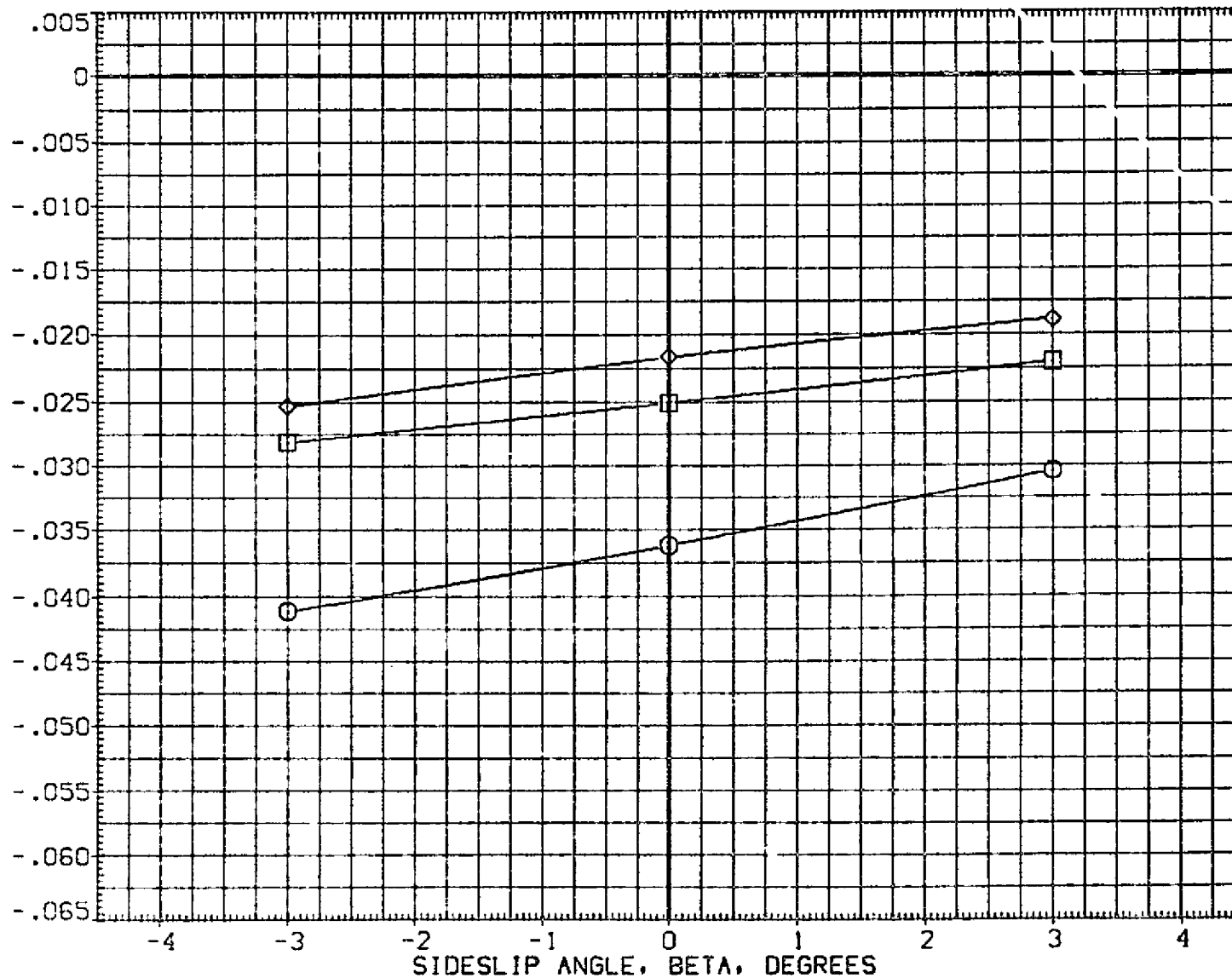


FIGURE 88. AMPLIFICATION FACTOR IN YAW, N51 JETS

SYMBOL

T/OA-I

PARAMETRIC VALUES

○
□
◇47.500
95.000
127.700

MACH

BDFLAP

NGJET

10.330

.000

4.000

ALPHA

T/OA

ELEVON

-10.000

190.000

.000

REFERENCE INFORMATION

SREF

LREF

BREF

XMRP

YMRP

ZMRP

SCALE

2690.0000

474.6000

936.6000

1076.7000

.0000

375.0000

.0100

SQ.FT.

INCHES

INCHES

IN. X0

IN. Y0

IN. Z0

RCS JET AMPLIFICATION FACTOR - SIDE FORCE, N(SF)

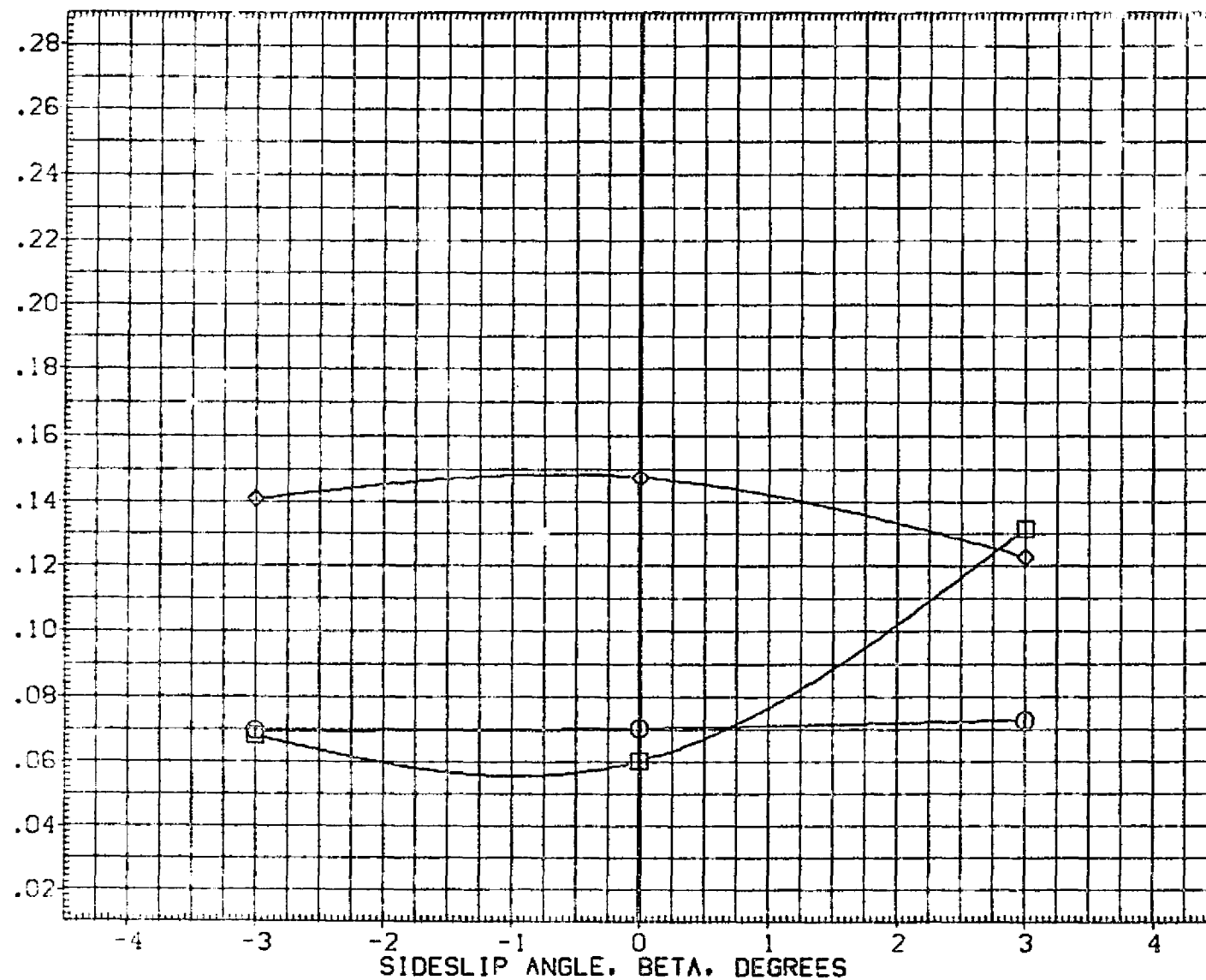


FIGURE 88. AMPLIFICATION FACTOR IN YAW, N51 JETS

01N51

LARC CFHT 118 (MA-22)

(CJA128)

SYMBOL	T/QA-1	MACH	PARAMETRIC VALUES	ALPHA	T/QA	ELEVON
○	47.500	10.330	.000	.000		
□	95.000	.000	190.000			
◇	127.700	4.000				

REFERENCE INFORMATION		
SREF	2690.0000	50. FT.
LREF	474.8000	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - SIDE FORCE, N(SF)

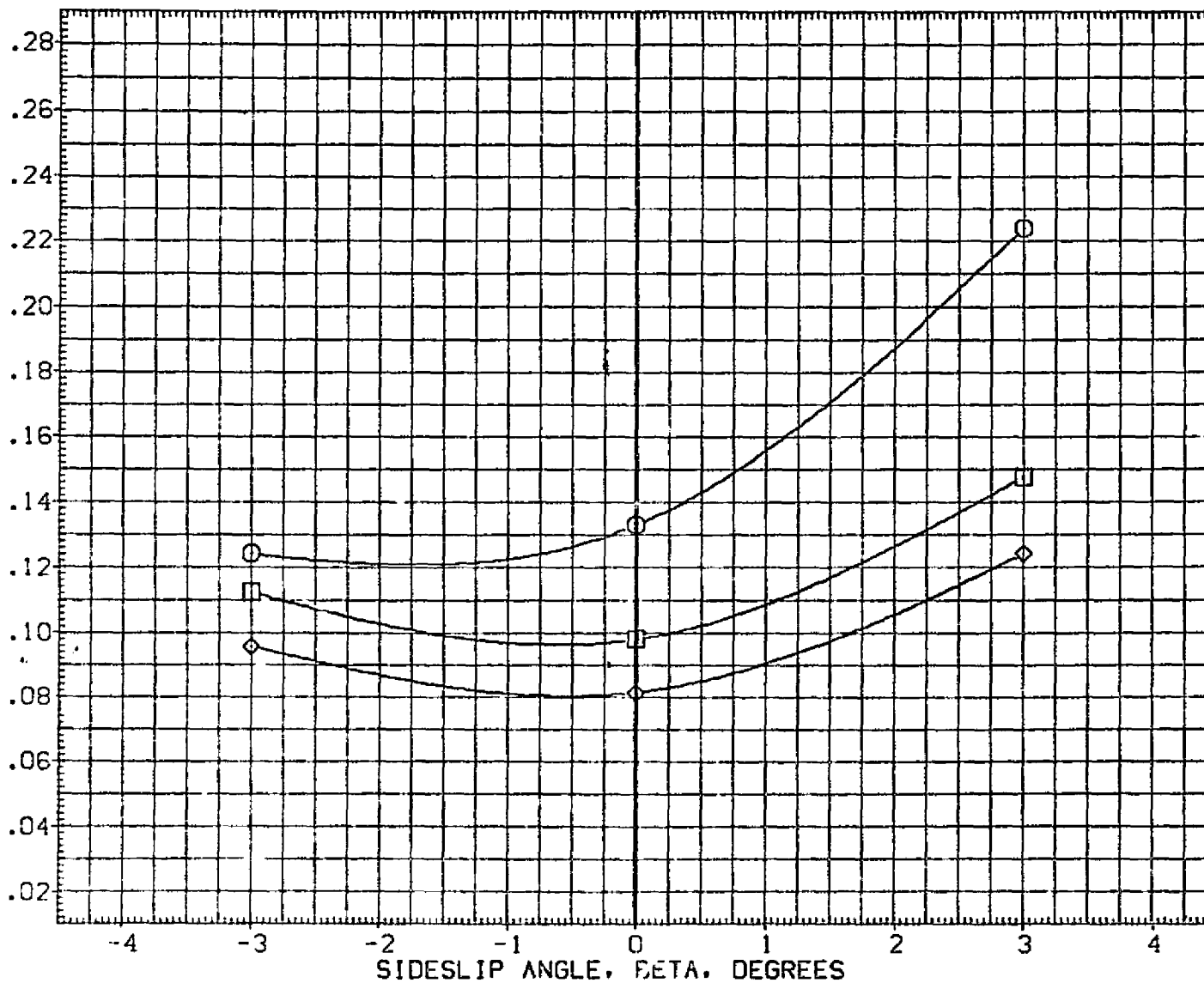


FIGURE 88. AMPLIFICATION FACTOR IN YAW, N51 JETS

SYMBOL	T/QA-1	PARAMETRIC VALUES
○	47.500	MACH 10.330 ALPHA 10.000
□	95.000	80FLAP .000 T/QA 190.000
◇	127.700	NO.JET 4.000 ELEVON .000

REFERENCE INFORMATION		
SREF	2690.0000	50.FT.
LREF	472.0000	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. Y0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Y0
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - SIDE FORCE, N(SF)

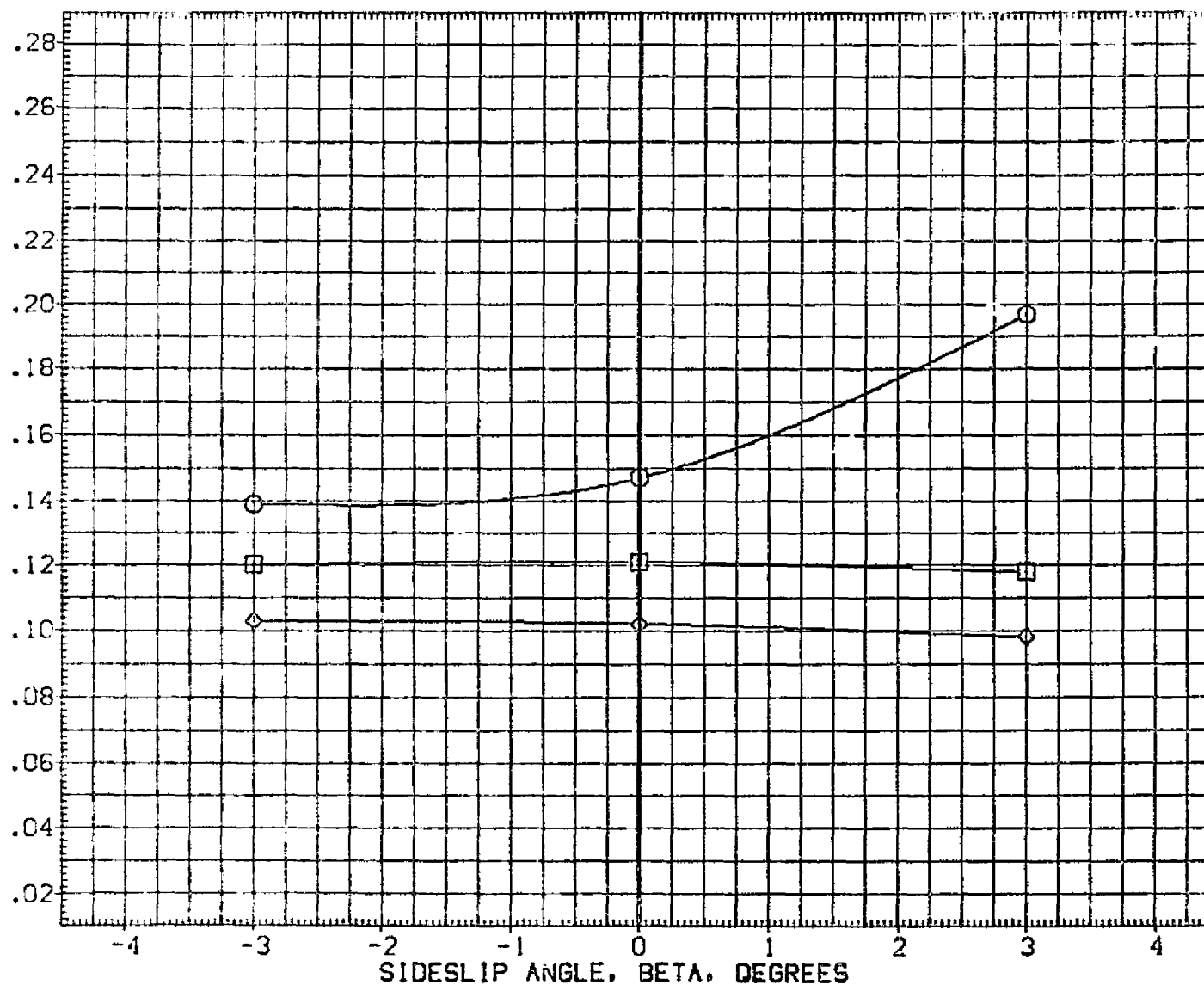


FIGURE 88. AMPLIFICATION FACTOR IN YAW, N51 JETS

01N51

1 ARC CFHT 118 (MA-22)

(CJA128)

SYMBOL

T/QA-1

MACH

PARAMETRIC VALUES

10.330

ALPHA

20.000

○

95.000

BD FLAP

.000

T/QA

190.000

◇

127.700

NO. JET

4.000

ELEVON

.000

REFERENCE INFORMATION

SREF 2690.0000

SQ. FT.

LREF 474.8000

INCHES

BREF 936.6800

INCHES

XMRP 1076.7000

IN. X0

YMRP .0000

IN. Y0

ZMRP 375.0000

IN. Z0

SCALE .0100

RCS JET AMPLIFICATION FACTOR - SIDE FORCE, N(SF)

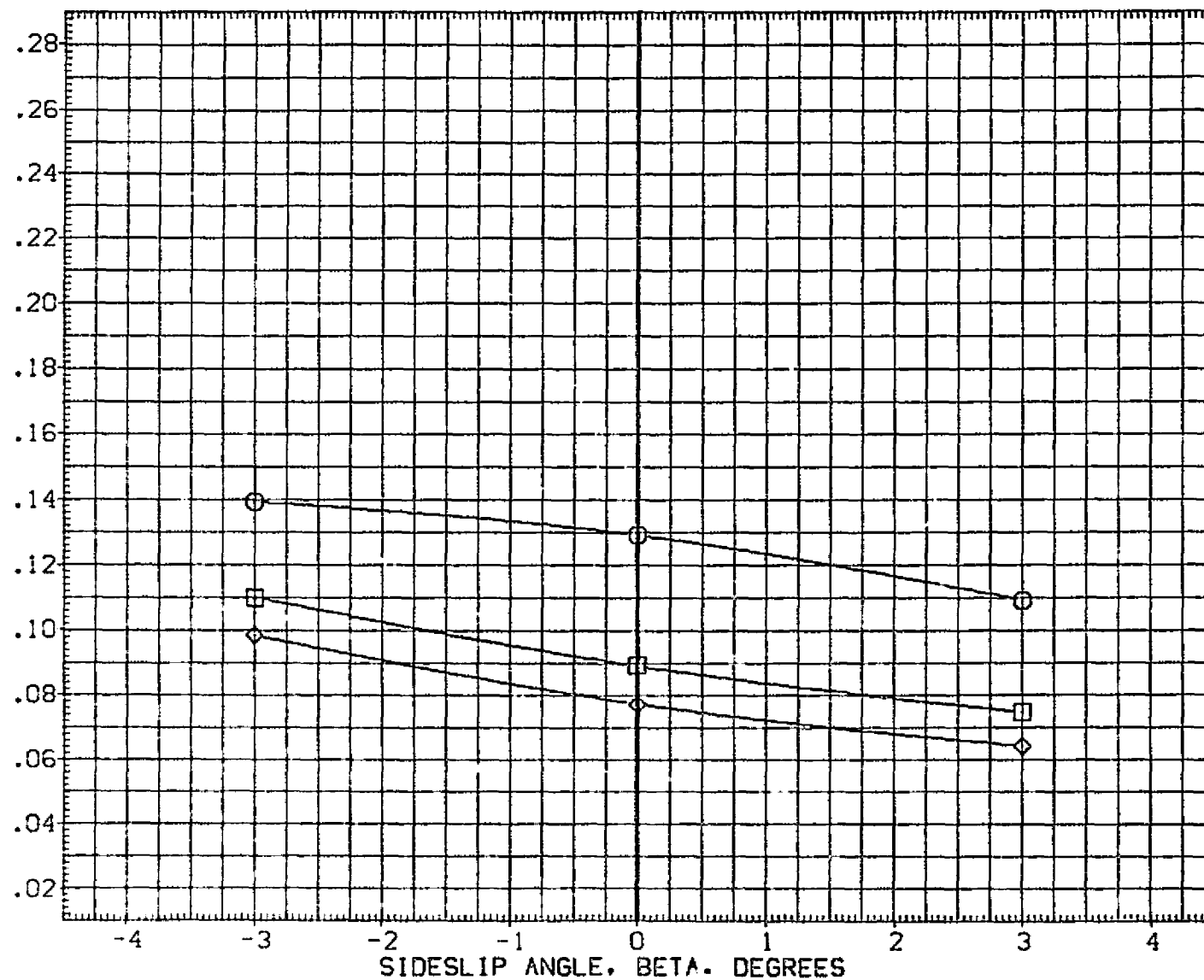


FIGURE 88. AMPLIFICATION FACTOR IN YAW, N51 JETS

SYMBOL	T/QA-1	PARAMETRIC VALUES
○	47.500	MACH 10.330 ALPHA 35.000
□	95.000	BDFLAP .000 T/QA 190.000
◇	127.700	NOJET 4.000 ELEVON .000

REFERENCE INFORMATION		
SREF	28.0000	IN. Y0
LREF	474.8000	IN. Z0
BREF	936.6800	IN. Y0
XMRP	1076.7000	IN. Z0
YMRP	.0000	
ZMRP	375.0000	
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - SIDE FORCE, N(SF)

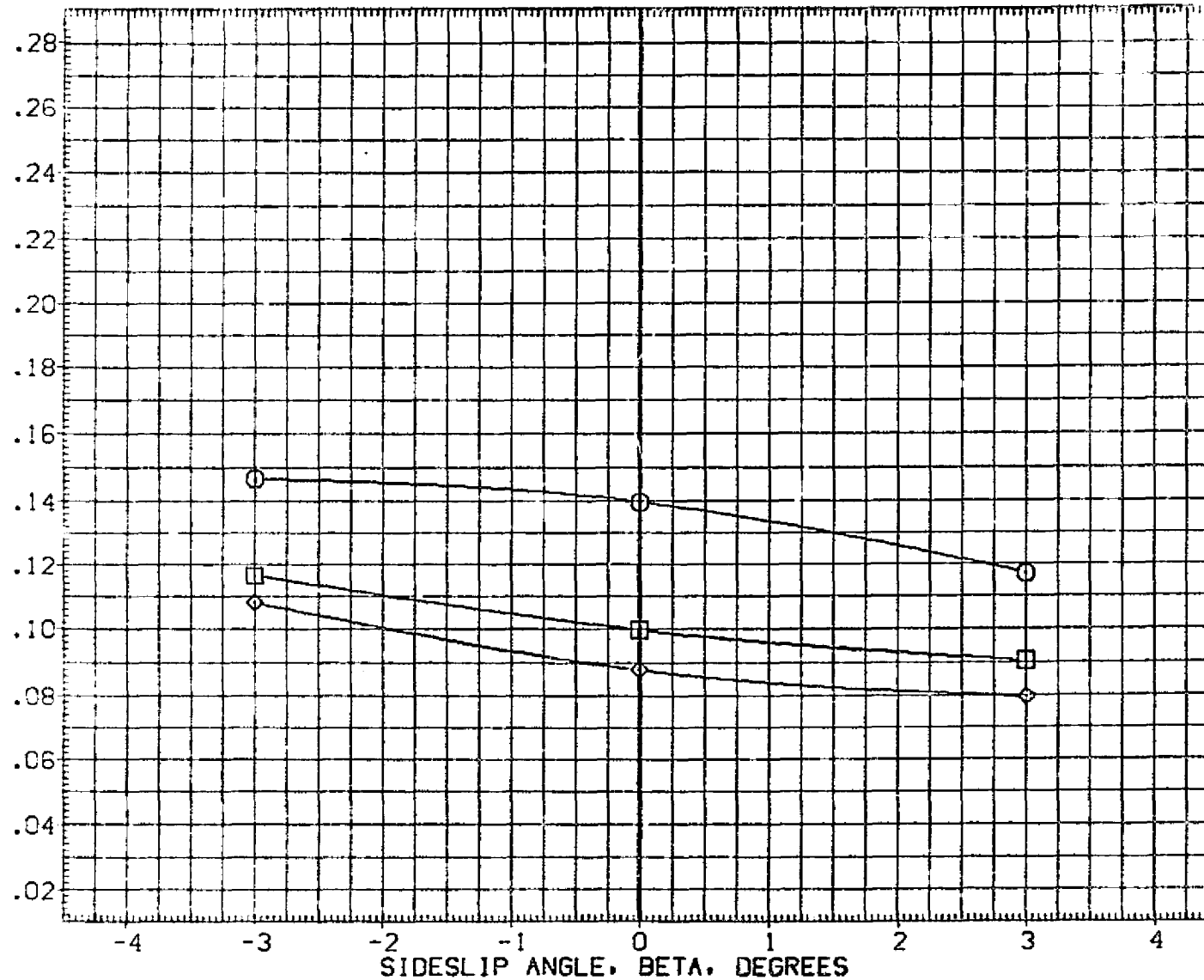


FIGURE 88. AMPLIFICATION FACTOR IN YAW, N51 JETS

01N85

LARC CFHT 118 (MA-22)

(CJA119)

SYMBOL	T/QA-1	PARAMETRIC VALUES			
○	47.500	MACH	10.330	ALPHA	-10.000
□	95.000	BDFLAP	.000	T/QA	95.000
◇	190.000	NO.JET	2.000	ELEVON	.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8000	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - PITCH, N(PM)

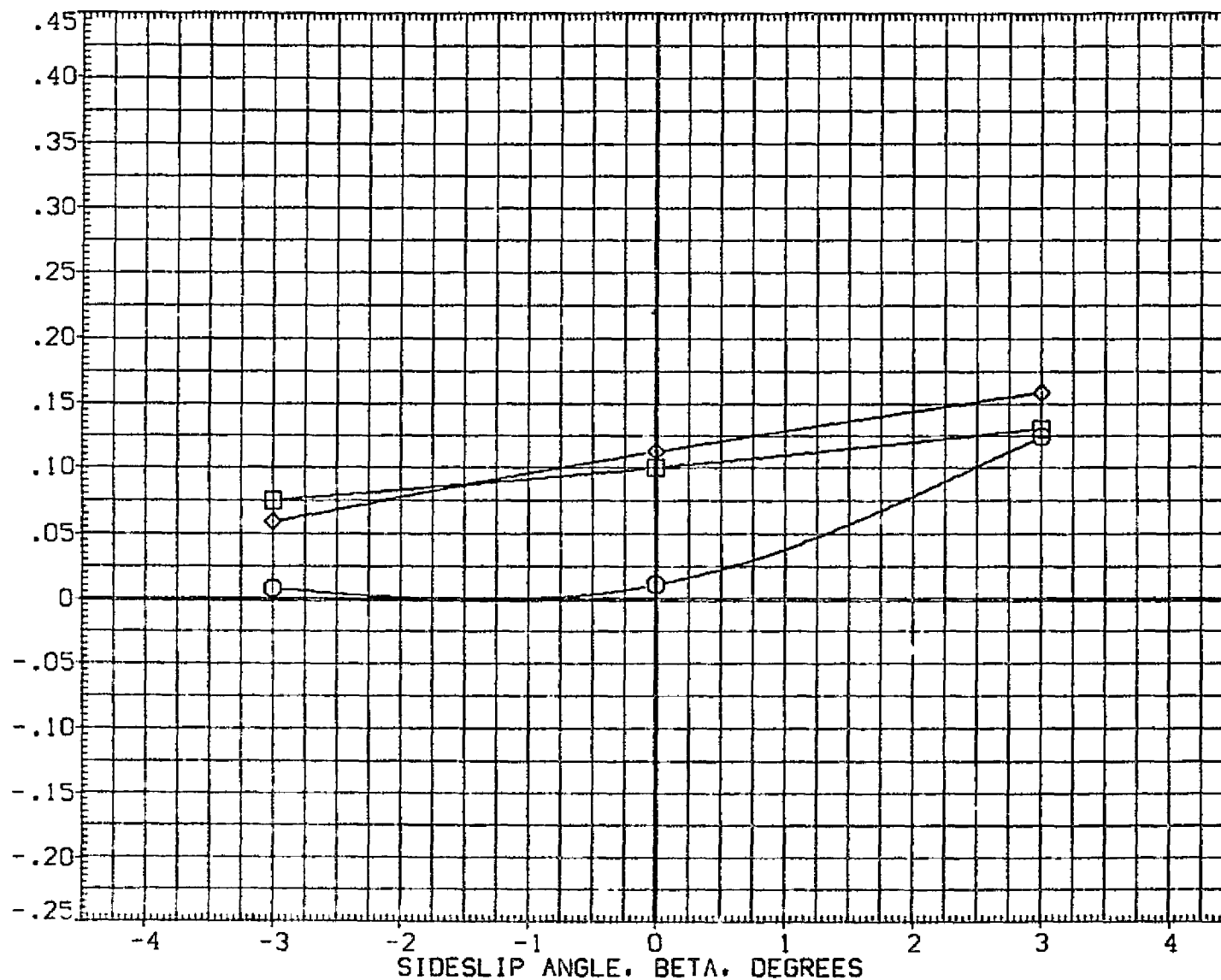


FIGURE 89. AMPLIFICATION FACTOR IN YAW, N85 JETS

SYMBOL	T/QA-1	MACH	PARAMETRIC VALUES	ALPHA	T/QA	ELEVON
○	47.500	10.330	.000	.000	.000	.000
□	95.000	.000	95.000	.000	.000	.000
◇	190.000	2.000	.000	.000	.000	.000

REFERENCE INFORMATION		
SREF	2690.0000	50. FT.
LREF	474.8000	INCHES
BREF	938.6800	INCHES
XMRP	1076.7000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - PITCH, N(PM)

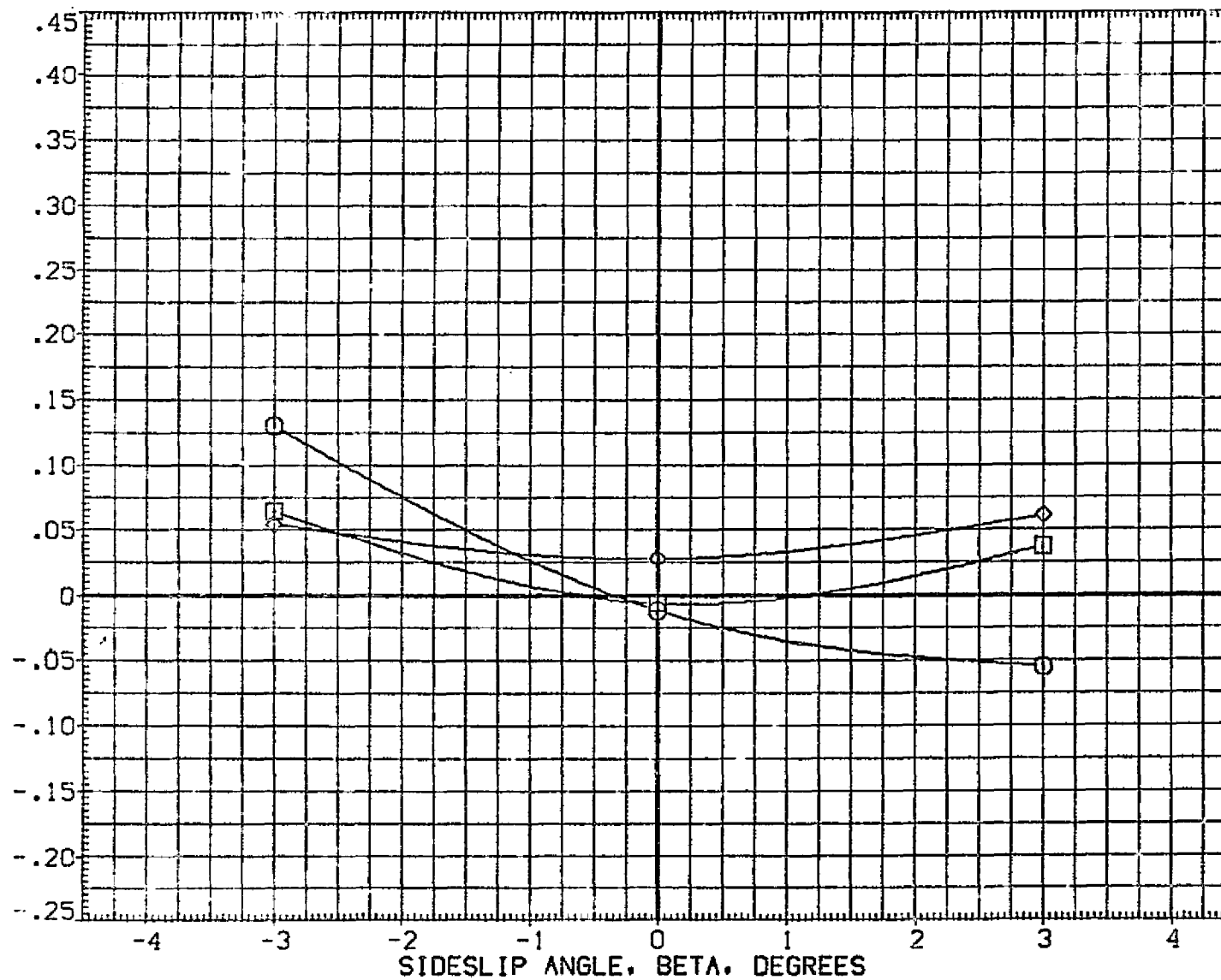


FIGURE 89. AMPLIFICATION FACTOR IN YAW, N85 JETS

01N85

LARC CFHT 118 (MA-22)

(CJA119)

SYMBOL

T/QA-1

PARAMETRIC VALUES

REFERENCE INFORMATION

○
□
◇

47.500
95.000
190.000

MACH
BDFLAP
NGJET

10.330
.000
2.000

ALPHA
T/QA
ELEVON

10.000
95.000
.000

SREF 2690.0000
LREF 474.8000
BREF 936.6800
XMRP 1076.7000
YMRP .0000
ZMRP 375.0000
SCALE .0100

SQ.FT.
INCHES
IN. X0
IN. Y0
IN. Z0

RCS JET AMPLIFICATION FACTOR - PITCH, N(PM)

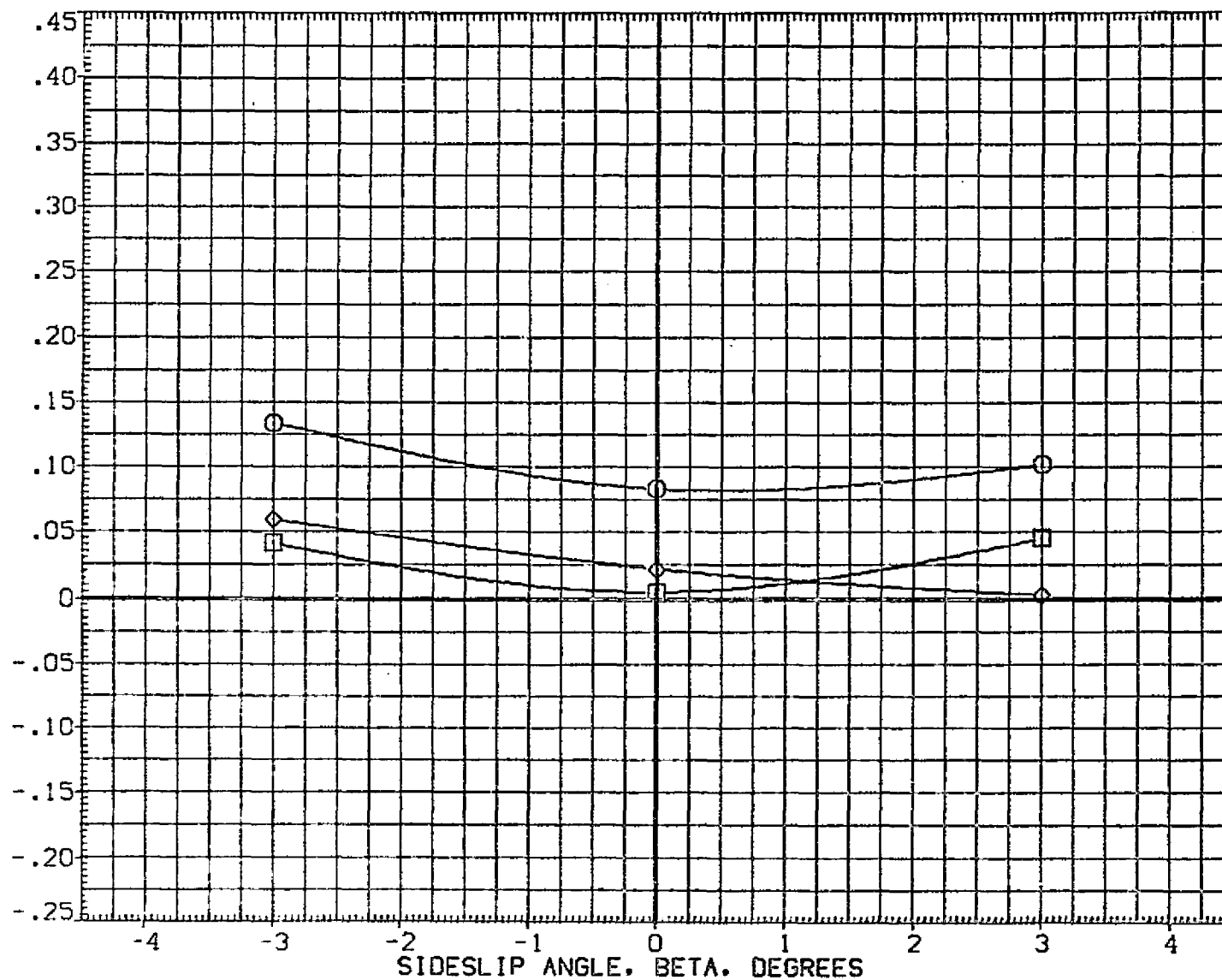


FIGURE 89. AMPLIFICATION FACTOR IN YAW, N85 JETS

SYMBOL

T/OA-1

PARAMETRIC VALUES

○
□
◇47.500
95.000
190.000MACH
BDPLAP
NOJET10.330
.000
2.000ALPHA
T/OA
ELEVON20.000
95.000
.000

REFERENCE INFORMATION

SREF	2690.0000	29. FT.
LREF	474.8000	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN.
YMRP	.0000	IN.
ZMRP	375.0000	IN.
SCALE	10100	

RCS JET AMPLIFICATION FACTOR - PITCH, N(PM)

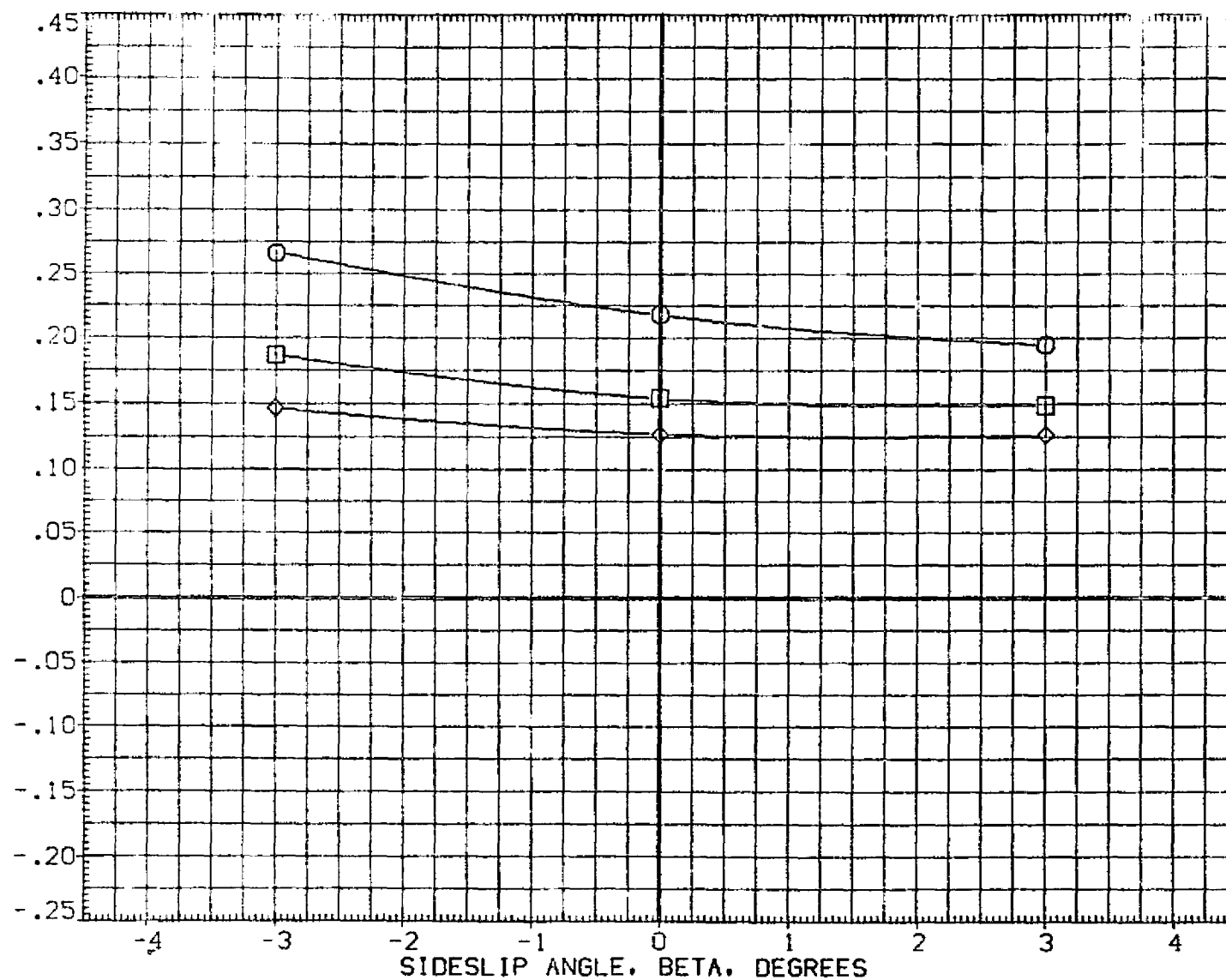


FIGURE 89. AMPLIFICATION FACTOR IN YAW, N85 JETS

01N85

LARC CFHT 118 (MA-22)

(CJA119)

SYMBOL

T/OA-1

PARAMETRIC VALUES

○

47.500

MACH

10.330

ALPHA

35.000

□

95.000

BD FLAP

.000

T/OA

95.000

◇

190.000

NO. JET

2.000

ELEVON

.000

REFERENCE INFORMATION

SREF 2690.0000

SQ. FT.

LREF 474.8000

INCHES

BREF 936.6800

INCHES

XMRP 1076.7000

IN. X0

YMRP .0000

IN. Y0

ZMRP 375.0000

IN. Z0

SCALE .0100

RCS JET AMPLIFICATION FACTOR - PITCH, N(PM)

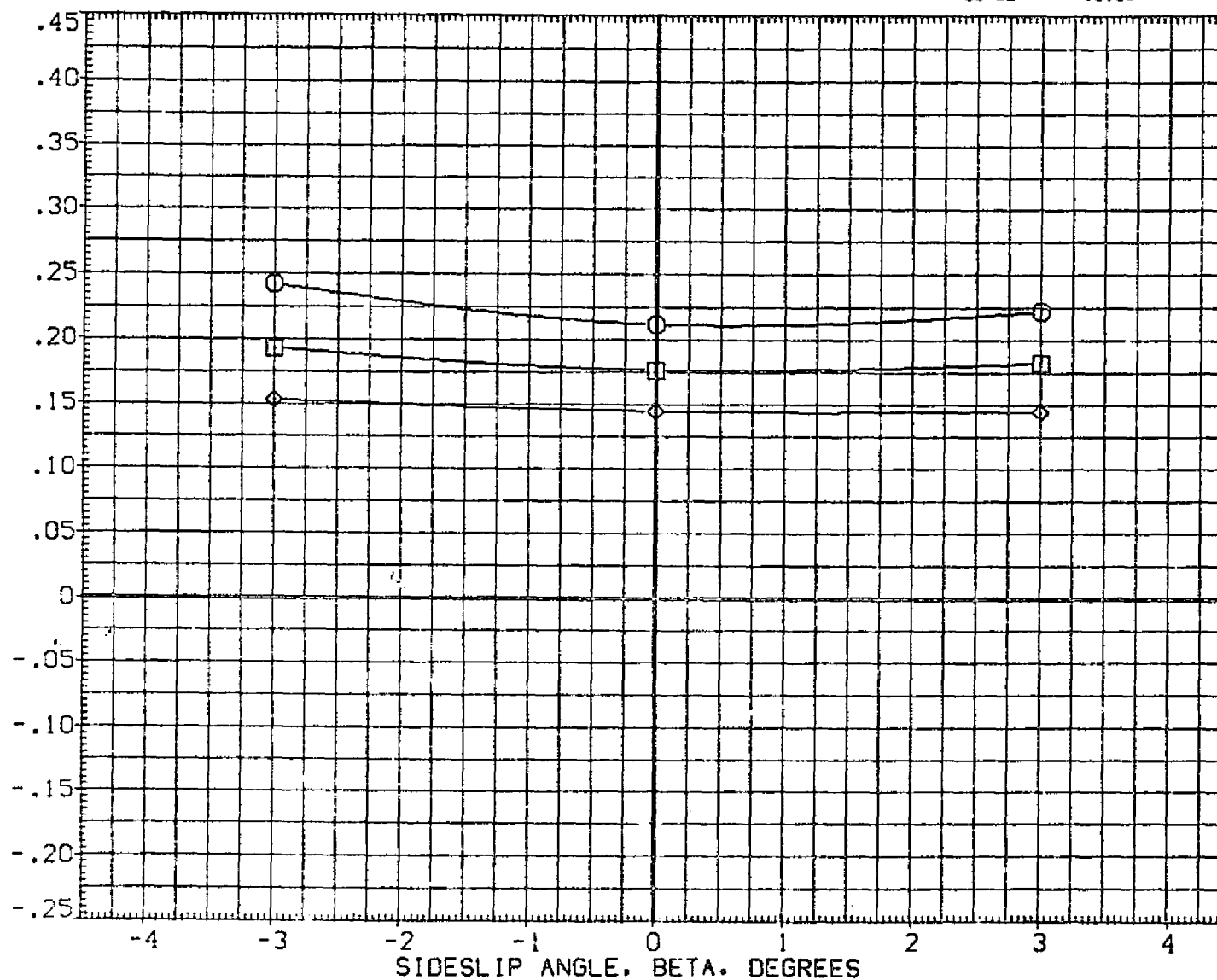


FIGURE 89. AMPLIFICATION FACTOR IN YAW, N85 JETS

SYMBOL

T/QA-1

PARAMETRIC VALUES

○
□
◇

47.500
95.000
190.000

MACH
BDFLAP
NO. JET

10.330
.000
2.000

ALPHA
T/QA
ELEVON

-10.000
95.000
.000

REFERENCE INFORMATION

SREF 2690.0000 SQ. FT.
LREF 471.8000 INCHES
BREF 936.6800 INCHES
XMR 1076.7000 IN. X0
YMR .0000 IN. Y0
ZMR 375.0000 IN. Z0
SCALE .0100

RCS JET AMPLIFICATION FACTOR - ROLL, NCRM)

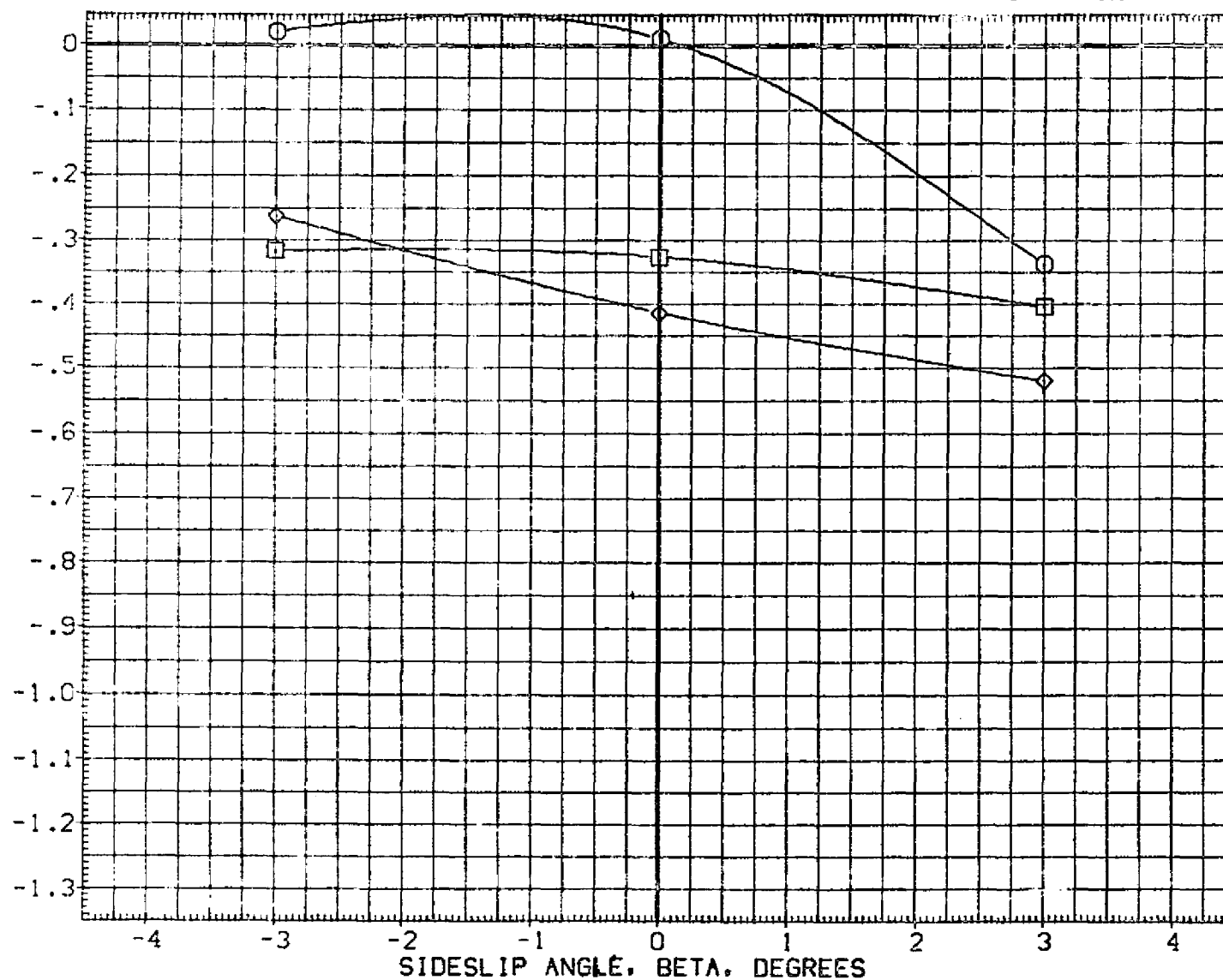


FIGURE 89. AMPLIFICATION FACTOR IN YAW, N85 JETS

01N85

LARC CEHT 118 (MA-22)

(CJA119)

SYMBOL

T/QA-1

MACH

PARAMETRIC VALUES

10.330

ALPHA

.000

○

47.500

BDPLAP

.000

T/QA

95.000

□

190.000

N3.JET

2.000

ELEVON

.000

◇

REFERENCE INFORMATION

SREF

2690.0000

SQ.FT.

LREF

474.8000

INCHES

BREF

936.6800

INCHES

XMRP

1076.7000

IN. X0

YMRP

.0000

IN. Y0

ZMRP

375.0000

IN. Z0

SCALE

.0100

RCS JET AMPLIFICATION FACTOR - ROLL, NCRM)

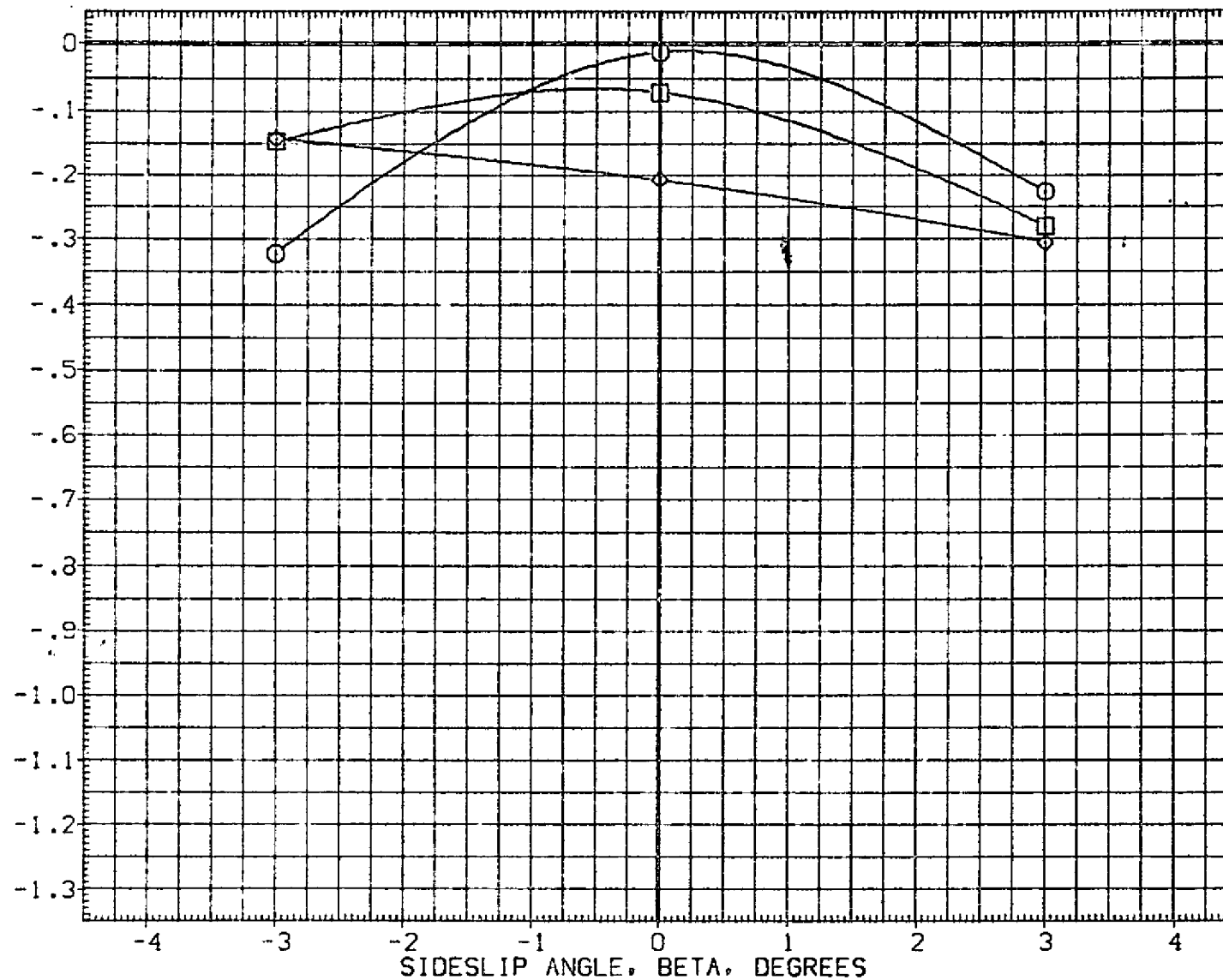


FIGURE 89. AMPLIFICATION FACTOR IN YAW, N85 JETS

SYMBOL



T/OA-1

47.500

MACH

80FLAP

ND.JET

PARAMETRIC VALUES

10.330

ALPHA

T/OA

ELEVON

10.000

95.000

.000

REFERENCE INFORMATION

SREF 2690.0000

LREF 474.8000

BREF 936.6800

XMRP 1076.7000

YMR .0000

ZMRP 375.0000

SCALE .0100

SQ.FT.

INCHES

INCHES

IN. X0

IN. Y0

IN. Z0

RCS JET AMPLIFICATION FACTOR - ROLL, NORM

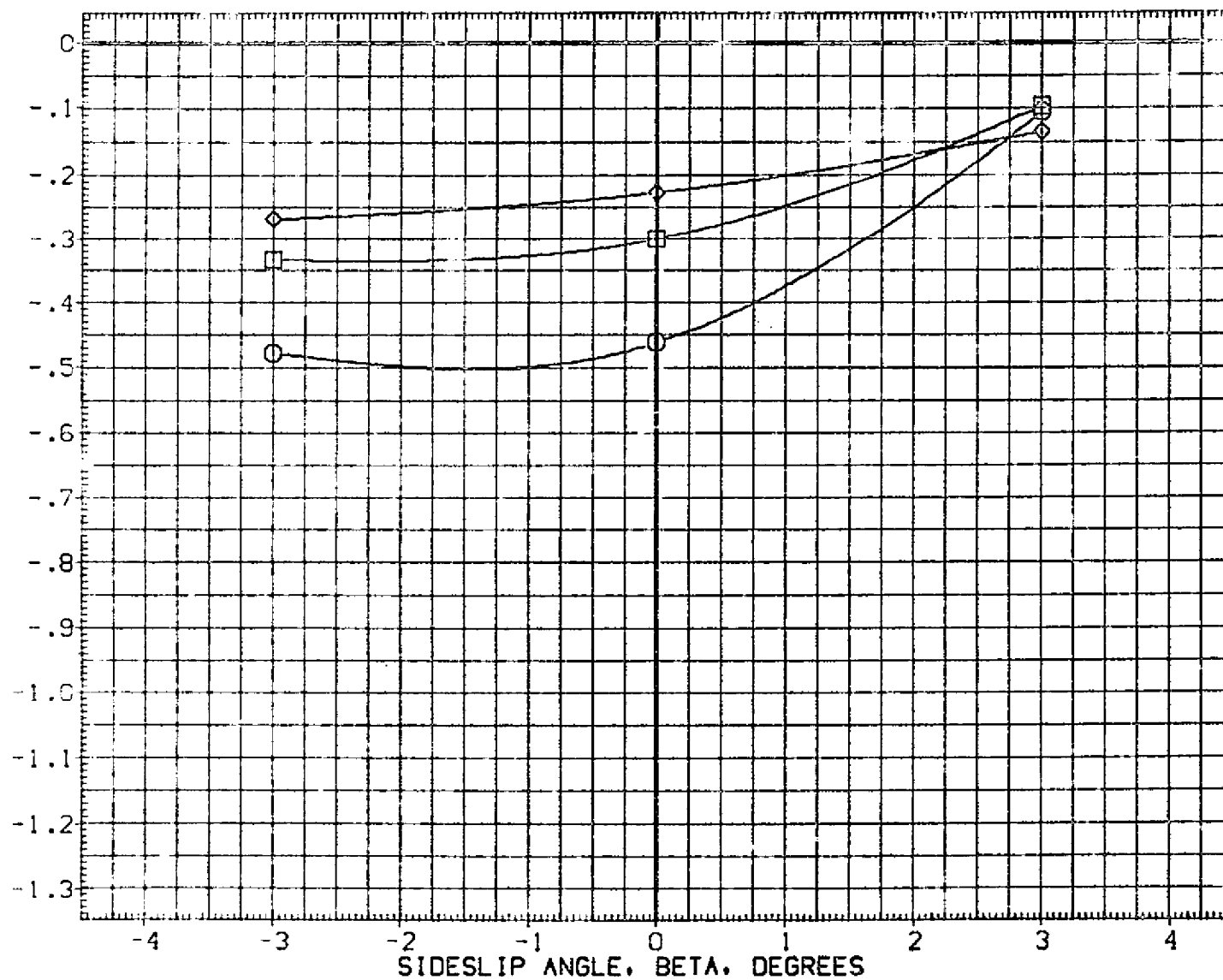


FIGURE 89. AMPLIFICATION FACTOR IN YAW, N85 JETS

01N85

LARC CFHT 118 (MA-22)

(CJA119)

SYMBOL

T/QA-1

PARAMETRIC VALUES

○

47.500

MACH

10.330

ALPHA

20.000

□

95.000

BDFLAP

.000

T/QA

95.000

◇

190.000

NO.JET

2.000

ELEVON

.000

REFERENCE INFORMATION

SREF

2690.0000

SQ.FT.

LREF

474.8000

INCHES

BREF

936.8800

INCHES

XMRP

1076.7000

IN. X0

YMRP

.0000

IN. Y0

ZMRP

375.0000

IN. Z0

SCALE

.0100

RCS JET AMPLIFICATION FACTOR - ROLL, NCRM)

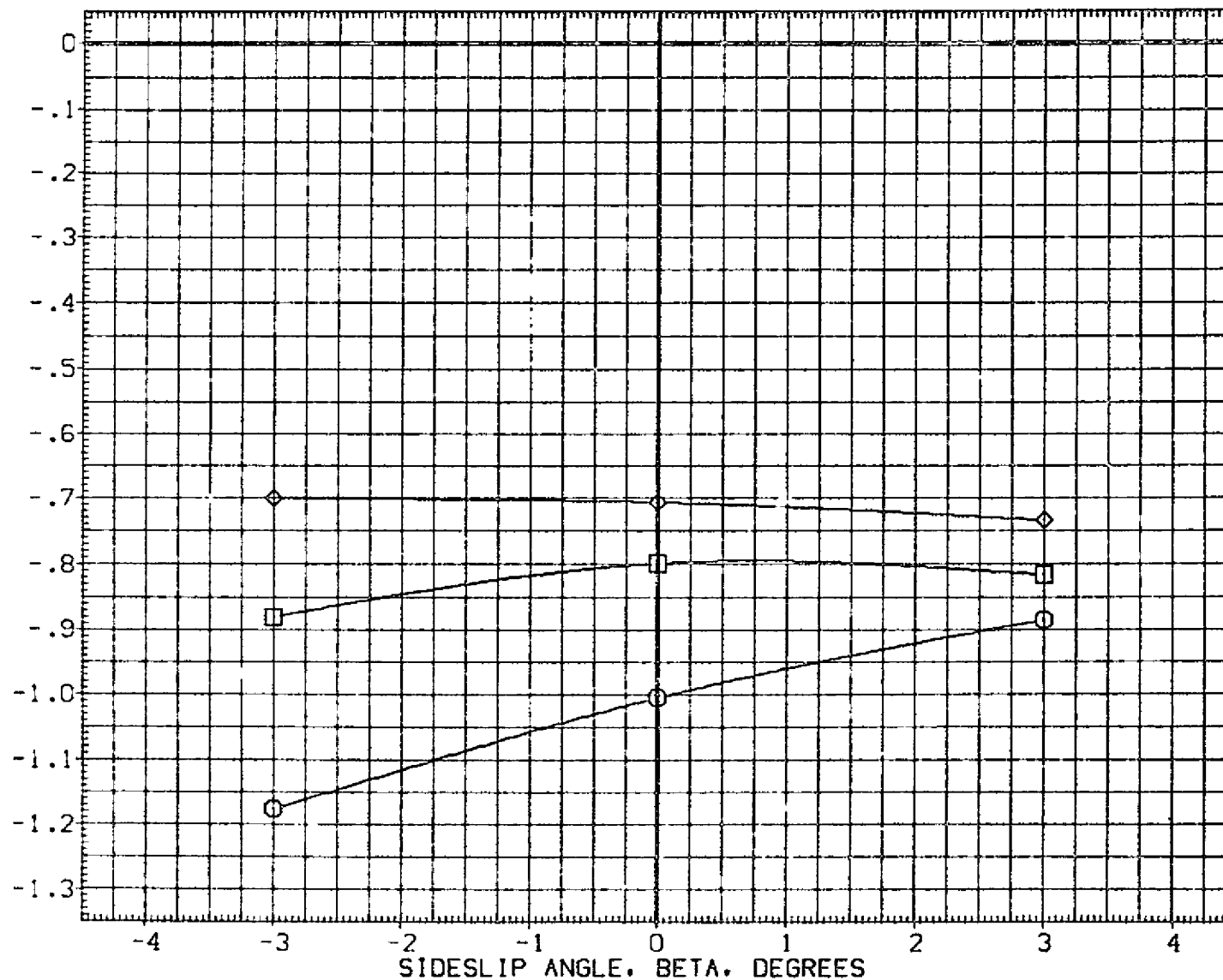


FIGURE 89. AMPLIFICATION FACTOR IN YAW, N85 JETS

SYMBOL

○
□
◇

T/QA-1

47.500

95.000

190.000

MACH

BDFLAP

NOJET

PARAMETRIC VALUES

10.330

ALPHA

35.000

T/QA

95.000

ELEVON

.000

REFERENCE INFORMATION

SREF 2690.0000

LREF 474.8000

BREF 936.8800

XREF 1076.7000

YREF .0000

SCALE 375.0000

SQ.FT.

INCHES

IN. X0

IN. Y0

RCS JET AMPLIFICATION FACTOR - ROLL, N(RM)

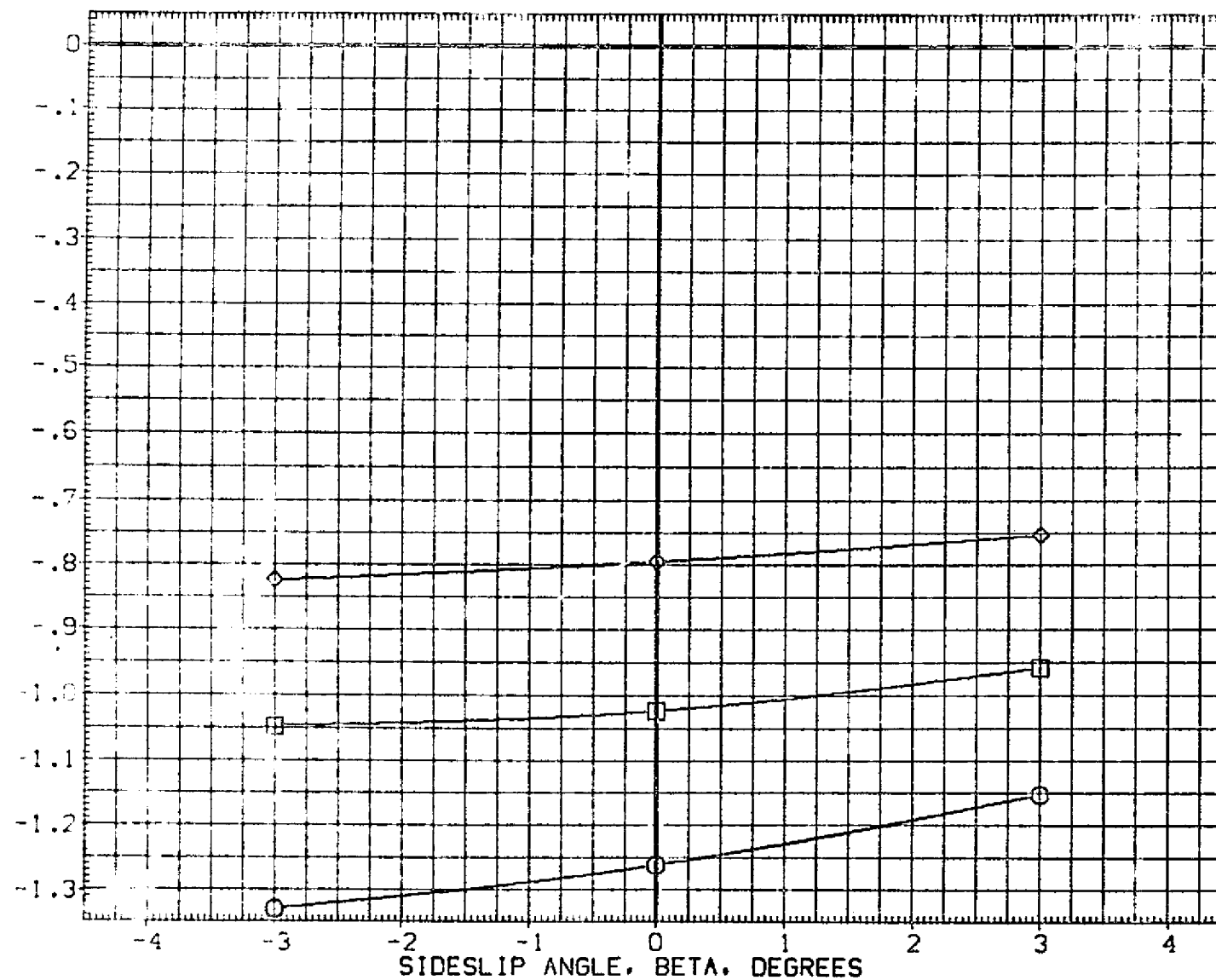


FIGURE 89. AMPLIFICATION FACTOR IN YAW, N85 JETS

01N85

LARC CFHT 118 (MA-22)

(CJA119)

SYMBOL

T/QA-1

PARAMETRIC VALUES

○

47.500

MACH

10.330

ALPHA

-10.000

□

95.000

80FLAP

.000

T/QA

95.000

◇

190.000

NO.JET

2.000

ELEVON

.000

REFERENCE INFORMATION

SREF

2690.0000

SQ.FT.

LREF

474.8000

INCHES

BREF

936.6800

INCHES

XMRP

1076.7000

IN. X0

YMRP

.0000

IN. Y0

ZMRP

375.0000

IN. Z0

SCALE

.0100

RCS JET AMPLIFICATION FACTOR - YAW, N(YM)

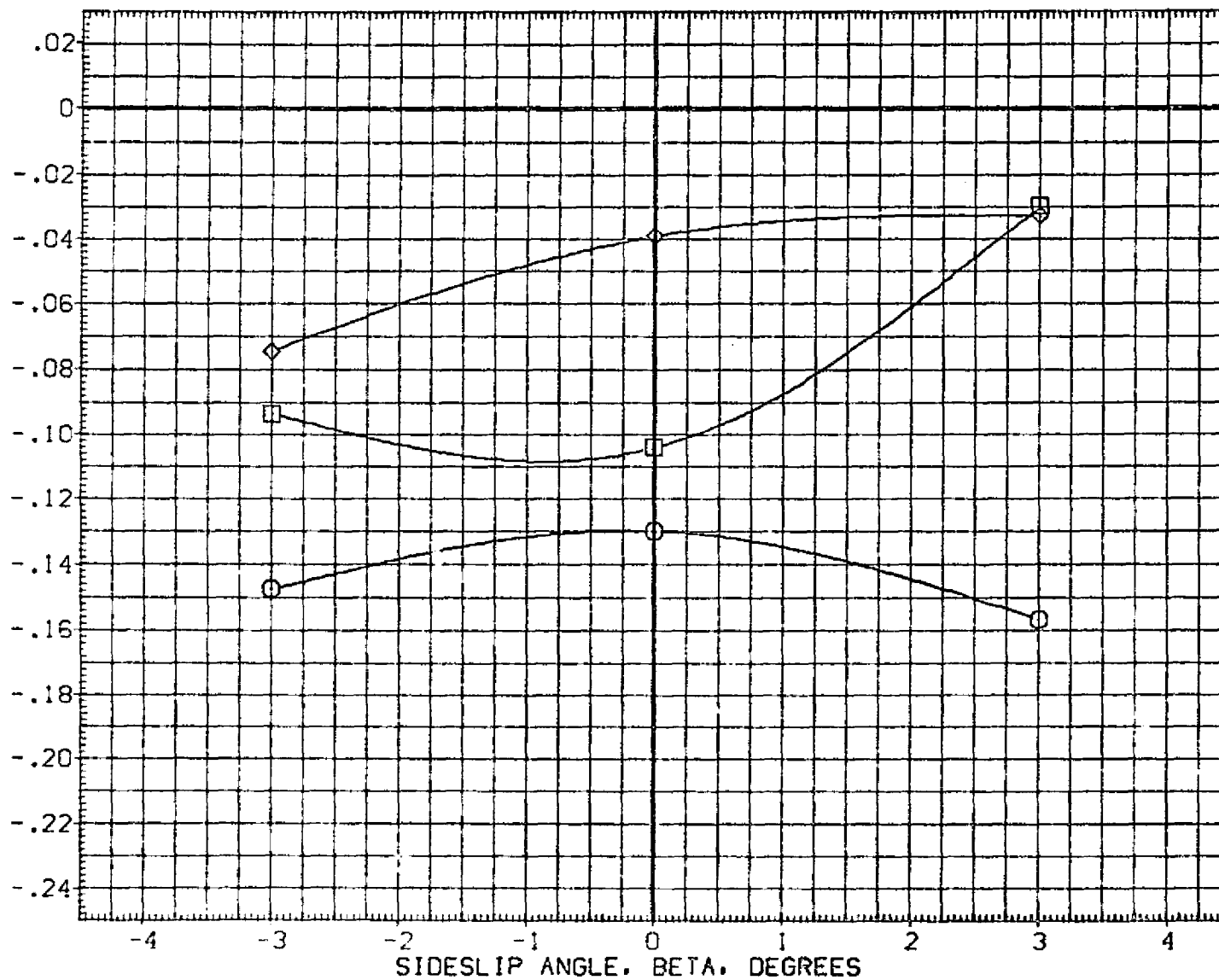


FIGURE 89. AMPLIFICATION FACTOR IN YAW, N85 JETS

SYMBOL	T/OA-1	PARAMETRIC VALUES
○	47.500	MACH 10.330 ALPHA .000
□	95.000	BDFLAP .000 T/OA 95.000
◇	190.000	NO.JET 2.000 ELEVON .000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8000	INCHES
BREF	936.6800	INCHES
XM	1076.7000	IN. X0
YM	.0000	IN. Y0
ZM	375.0000	IN. Z0
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - YAW, N(YM)

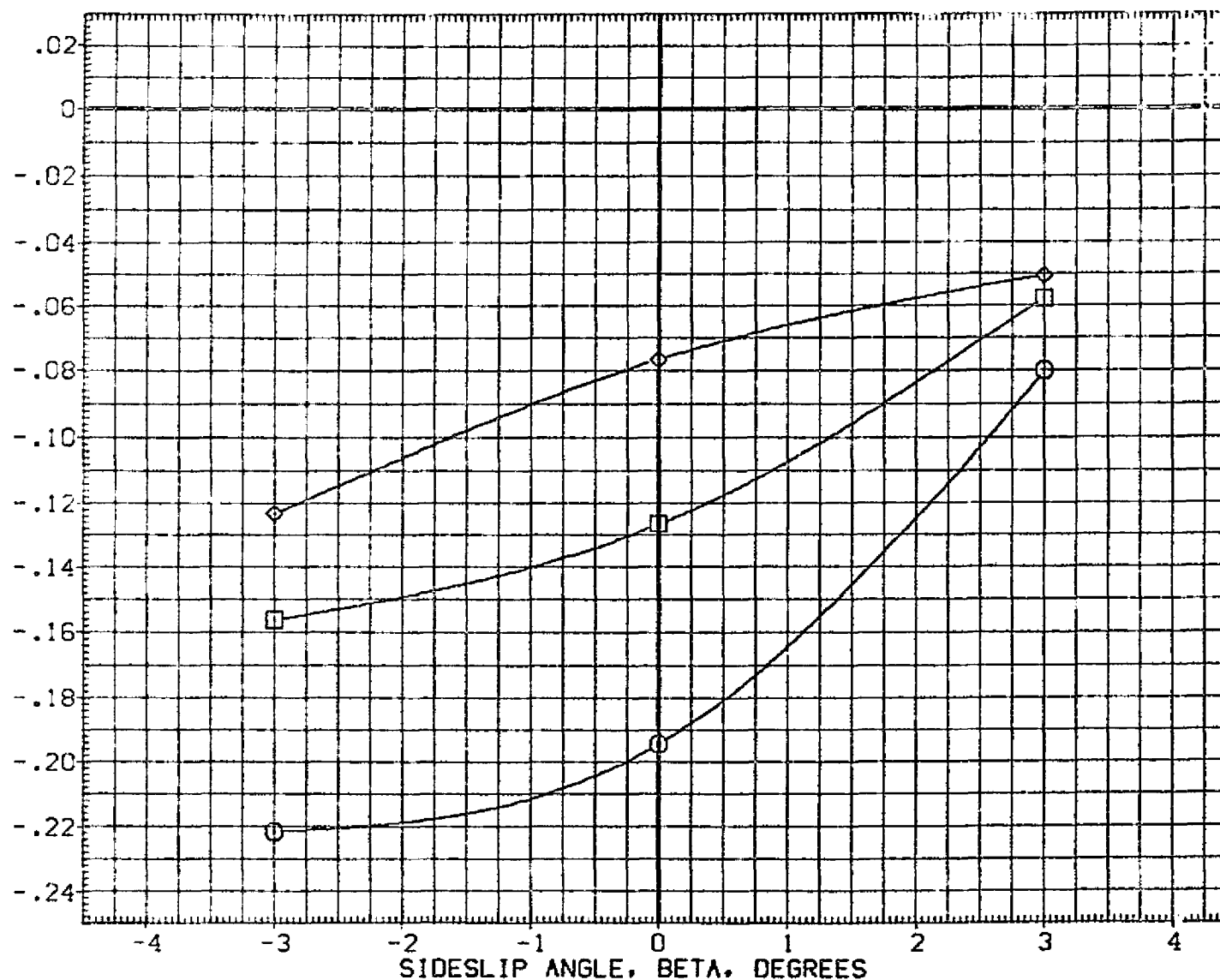


FIGURE 89. AMPLIFICATION FACTOR IN YAW, N85 JETS

01N85

LARC CFHT 118 (MA-22)

(CJA119)

SYMBOL

T/QA-1

PARAMETRIC VALUES

○

47.500

MACH

10.330

ALPHA

10.000

□

95.000

BDFLAP

.000

T/QA

95.000

◇

190.000

NO.JET

2.000

ELEVON

.000

REFERENCE INFORMATION

SREF 2690.0000

SQ.FT.

LREF 474.8000

INCHES

BREF 936.6800

INCHES

XMRP 1076.7000

IN. X0

YMRP .0000

IN. Y0

ZMRP 375.0000

IN. Z0

SCALE .0100

RCS JET AMPLIFICATION FACTOR - YAW, N(YM)

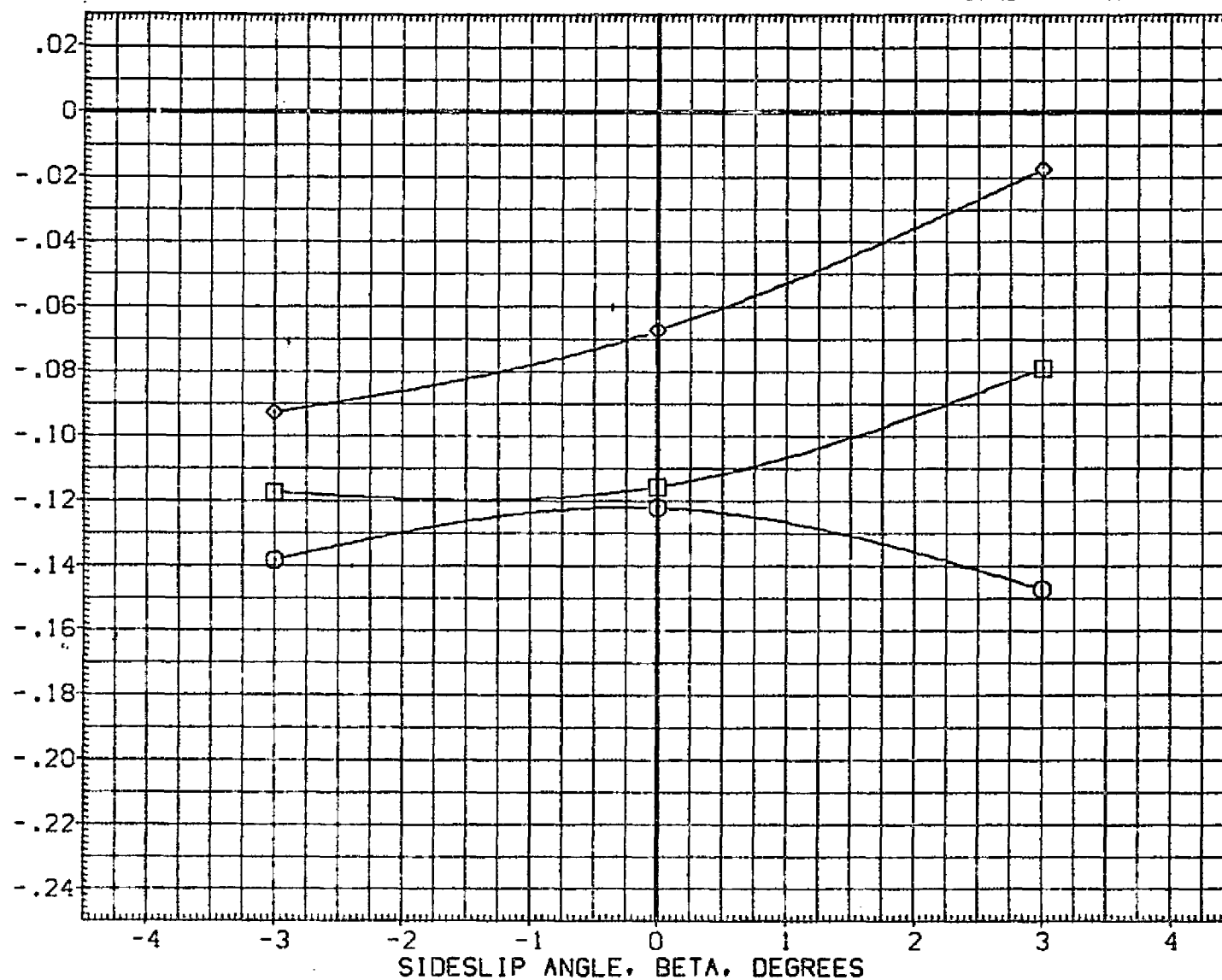


FIGURE 89. AMPLIFICATION FACTOR IN YAW, N85 JETS

SYMBOL	T/QA-1	PARAMETRIC VALUES
○	47.500	MACH 10.330 ALPHA 20.000
□	95.000	BDFLAP .000 T/QA 95.000
◇	190.000	NOJET 2.000 ELEVON .000

REFERENCE INFORMATION	
SREF	2690.0000
LREF	474.9000
BREF	936.6800
XMP	1076.7000
YMP	.0000
ZMP	375.0000
SCALE	.0100

RCS JET AMPLIFICATION FACTOR - YAW, N(YM)

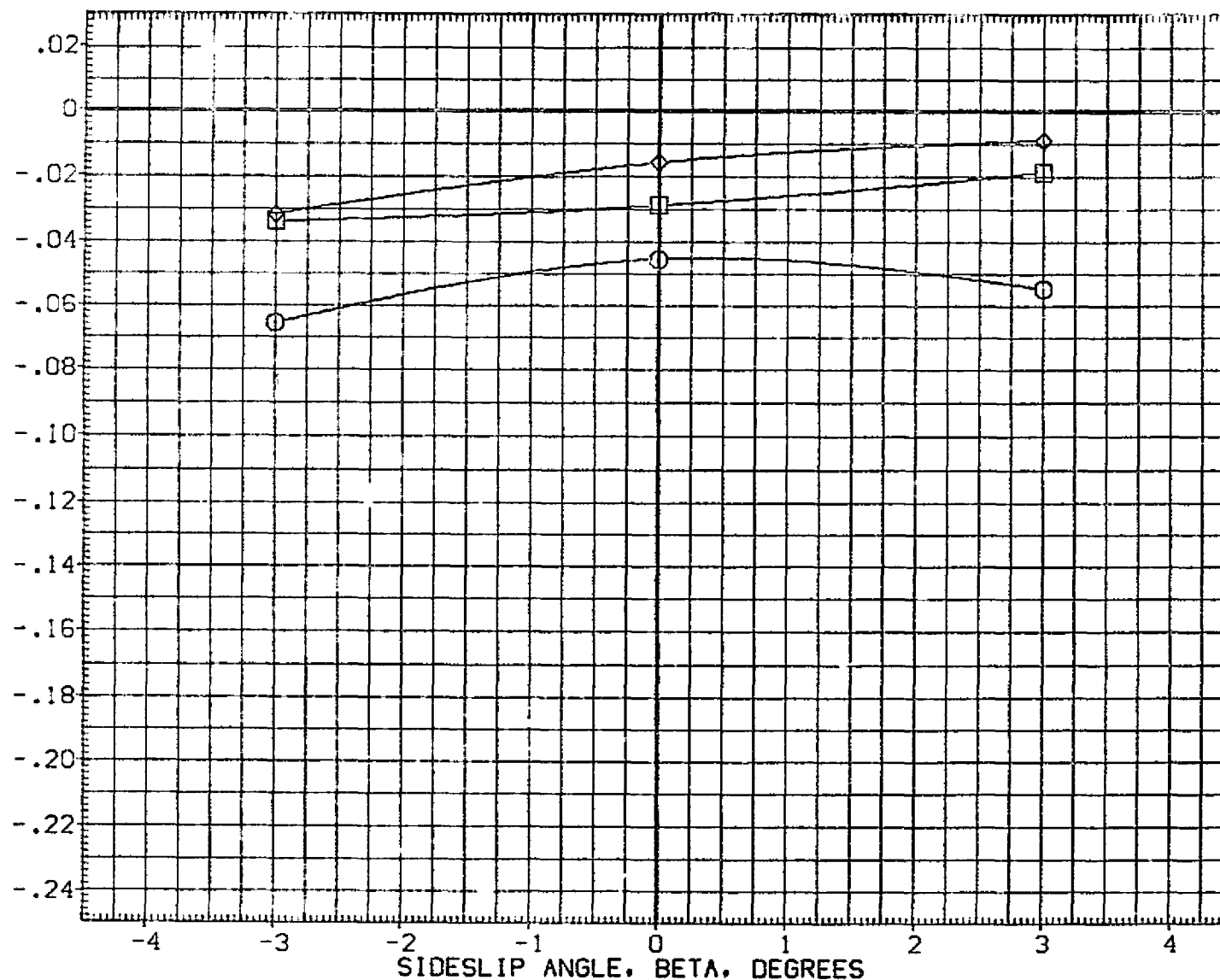


FIGURE 89. AMPLIFICATION FACTOR IN YAW, N85 JETS

01N85

LARC CFHT 118 (MA-22)

(CJA119)

SYMBOL

T/QA-1

PARAMETRIC VALUES

○

47.500

MACH

10.330

ALPHA

35.000

□

95.000

BDFLAP

.000

T/QA

95.000

◇

190.000

NO JET

2.000

ELEVON

.000

REFERENCE INFORMATION

SREF

2690.0000

SQ.FT.

LREF

474.8000

INCHES

BREF

936.6800

INCHES

XMRP

1076.7000

IN. X0

YMRP

.0000

IN. Y0

ZMRP

375.0000

IN. Z0

SCALE

.0100

RCS JET AMPLIFICATION FACTOR - YAW, N(YM)

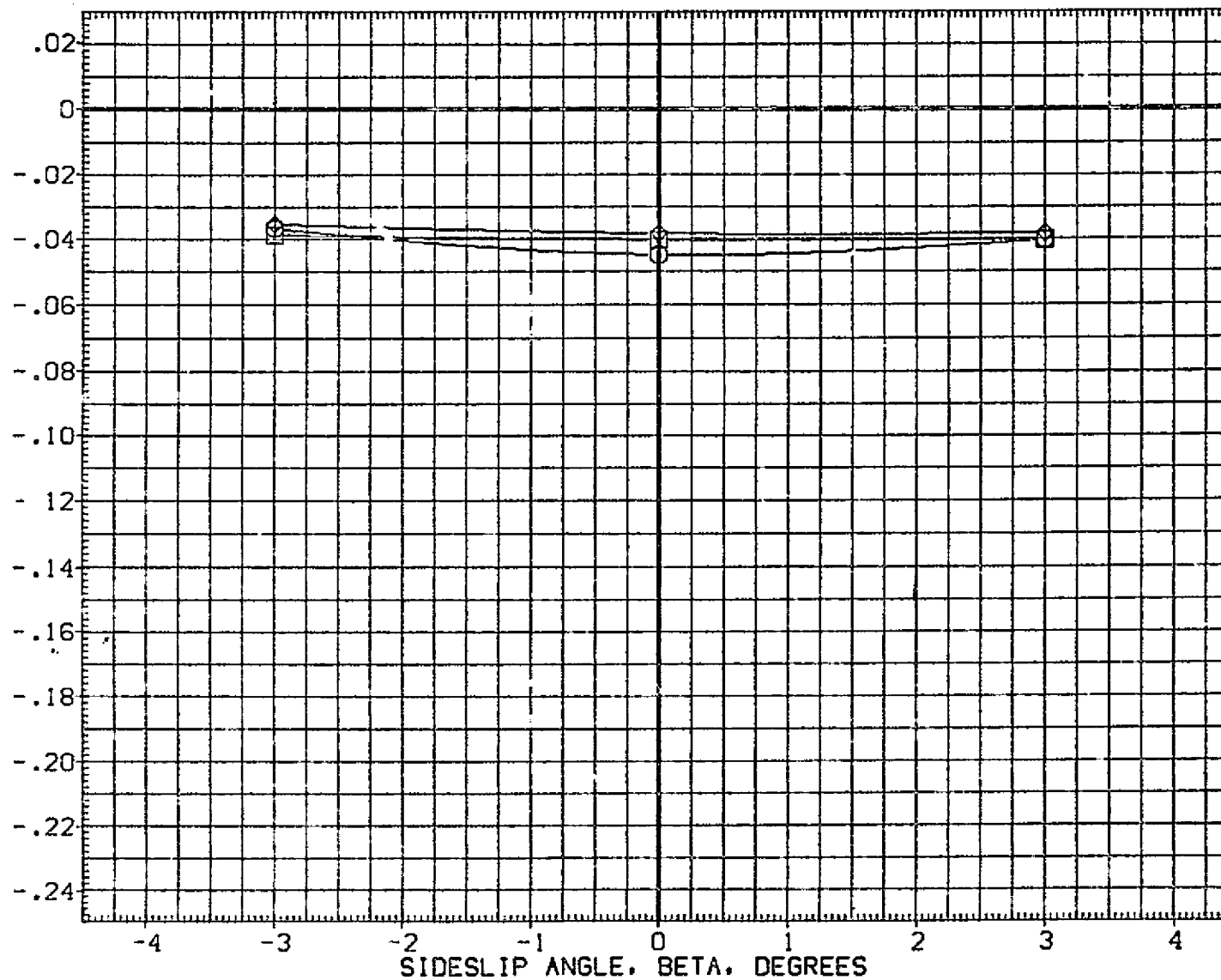


FIGURE 89. AMPLIFICATION FACTOR IN YAW, N85 JETS

SYMBOL	T/QA-1	PARAMETRIC VALUES
○	47.500	MACH 10.330 ALPHA -10.000
□	95.000	BDFLAP .000 T/QA 95.000
◇	190.000	NO.JET 2.000 ELEVON .000

REFERENCE INFORMATION		
SREF	2690.0000	50. FT
LREF	474.8000	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. X
YMRP	.0000	IN. Y
ZMRP	375.0000	IN. Z
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - NORMAL FORCE, N(NF)

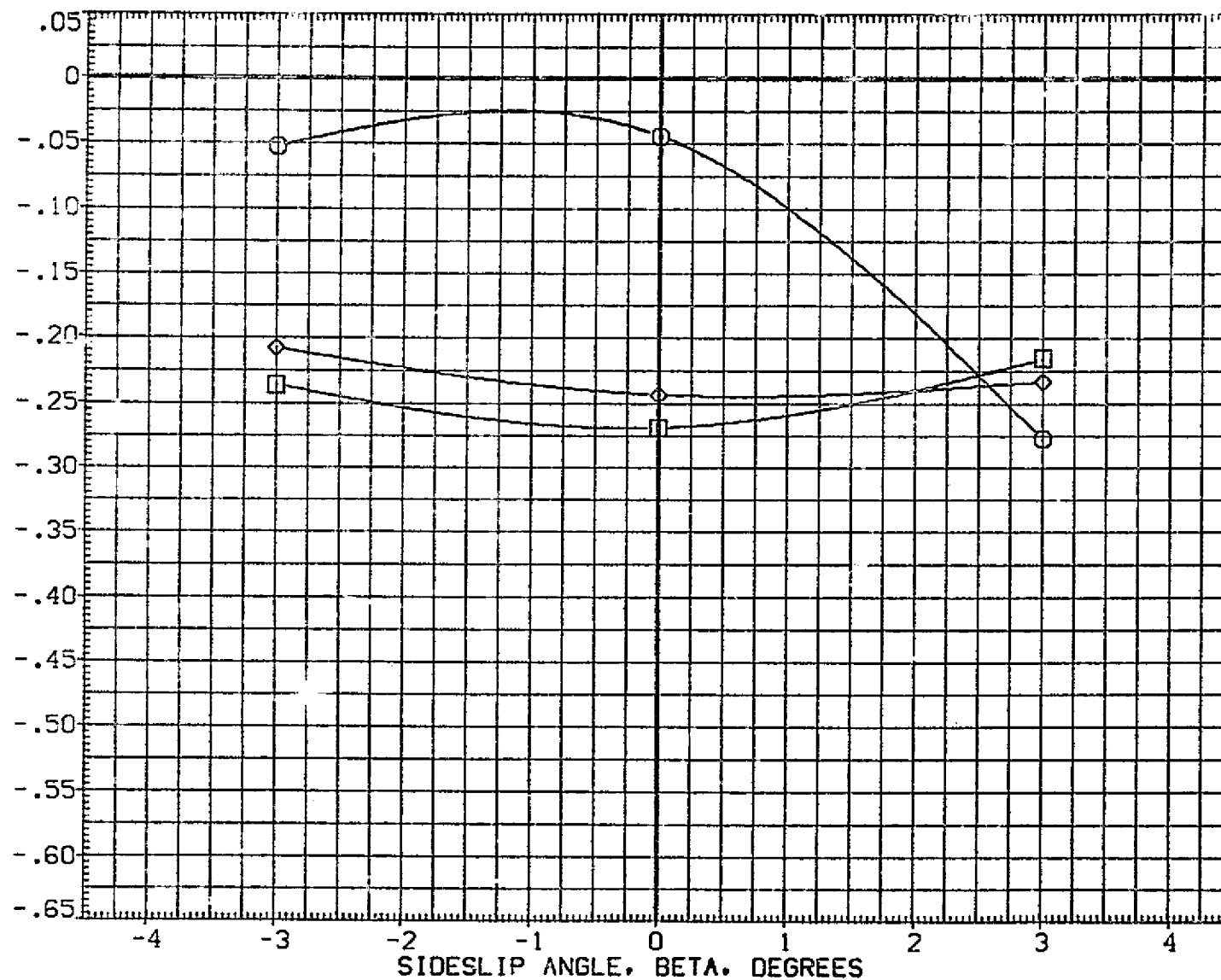


FIGURE 89. AMPLIFICATION FACTOR IN YAW, N85 JETS

01N85

LARC CFHT 118 (MA-22)

(CJA119)

SYMBOL	T/QA-1	PARAMETRIC VALUES
○	47.500	MACH 10.330 ALPHA .000
□	95.000	BDFLAP .000 T/QA 95.000
◇	190.000	NO.JET 2.000 ELEVON .000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8000	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - NORMAL FORCE, N(NF)

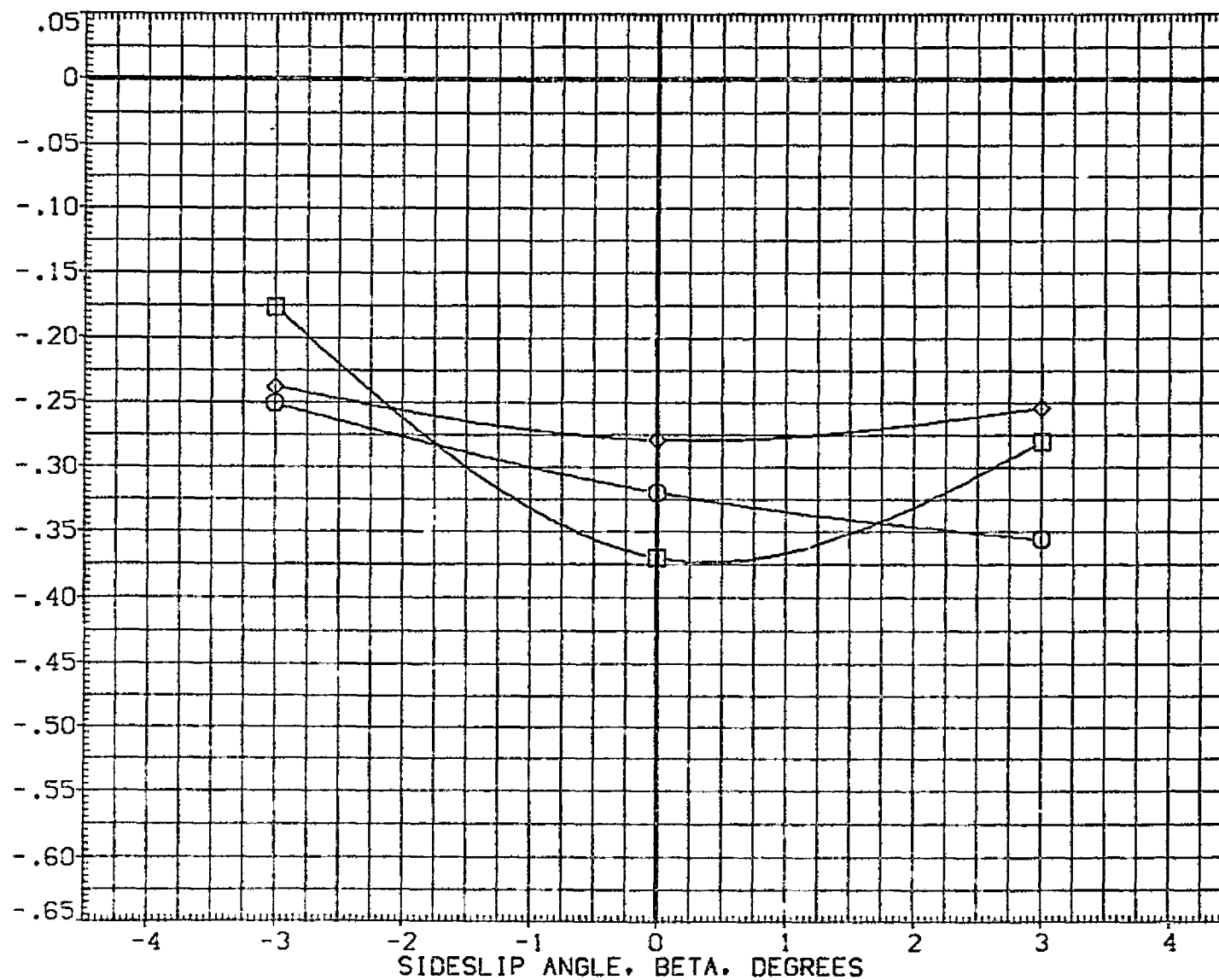


FIGURE 89. AMPLIFICATION FACTOR IN YAW, N85 JETS

01N85

LARC CFHT 118 (MA-22)

(CJA119)

SYMBOL	T/OA-1	MACH	PARAMETRIC VALUES	ALPHA	10.000
○	47.500	80FLAP	.000	T/OA	95.000
□	95.000	NOJET	2.000	ELEVON	.000
◇	190.000				

REFERENCE INFORMATION		
SREF	2690.0000	SR.F.F.
LREF	474.8000	INC.F.F.
BREF	936.6800	INC.F.F.
YMRP	1076.7000	IN. Y0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - NORMAL FORCE, N(NF)

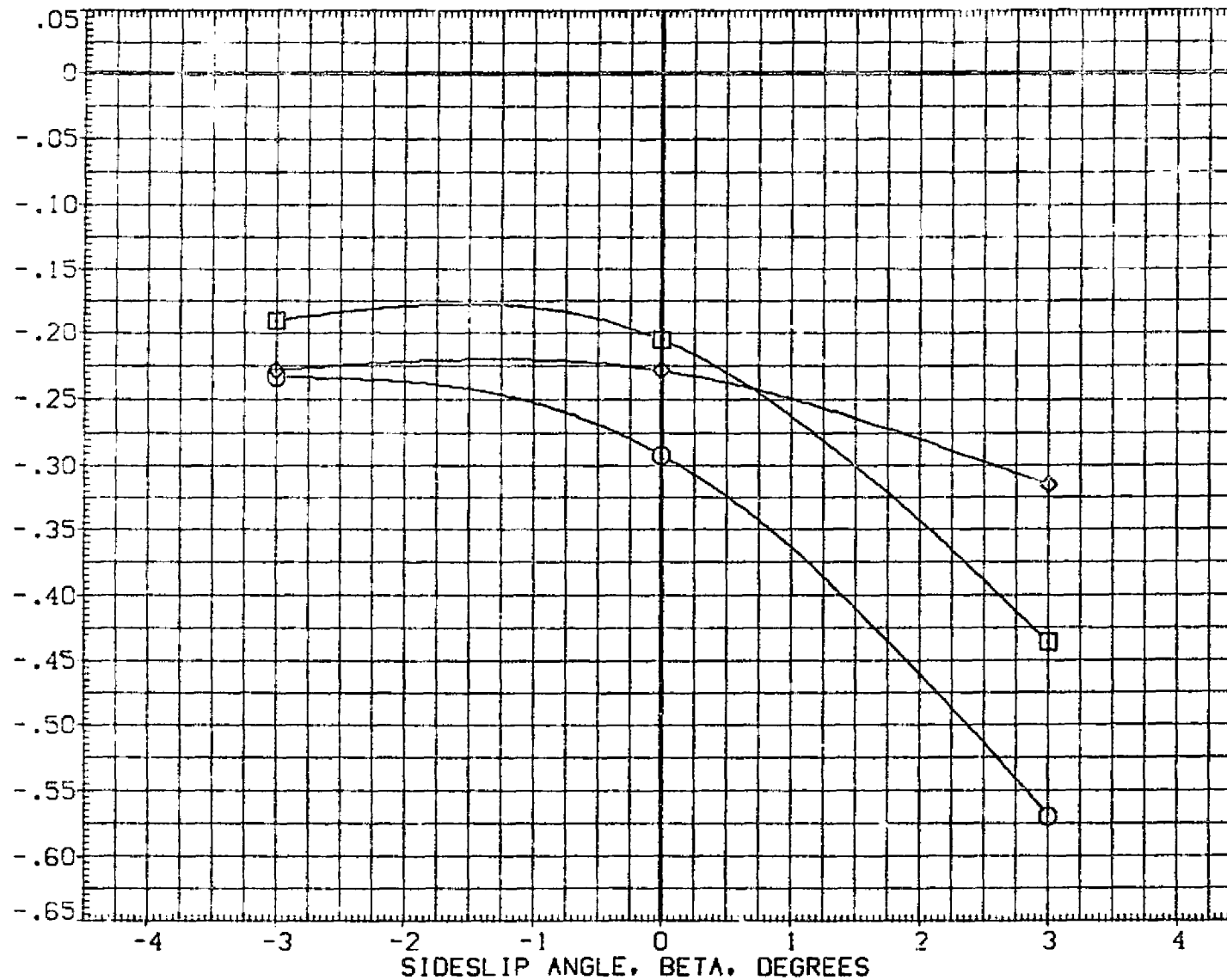


FIGURE 89. AMPLIFICATION FACTOR IN YAW, N85 JETS

01N85

LARC CFHT 118 (MA-22)

(CJA119)

SYMBOL

T/QA-1

PARAMETRIC VALUES

○

47.500

MACH

10.330

ALPHA

20.000

□

95.000

BDFLAP

.000

T/QA

95.000

◇

190.000

NO.JET

2.000

ELEVON

.000

REFERENCE INFORMATION

SREF

2690.0000

SQ.FT.

LREF

474.8000

INCHES

BREF

936.6800

INCHES

XMRP

1076.7000

IN. X0

YMRP

.0000

IN. Y0

ZMRP

375.0000

IN. Z0

SCALE

.0100

RCS JET AMPLIFICATION FACTOR - NORMAL FORCE, N(NF)

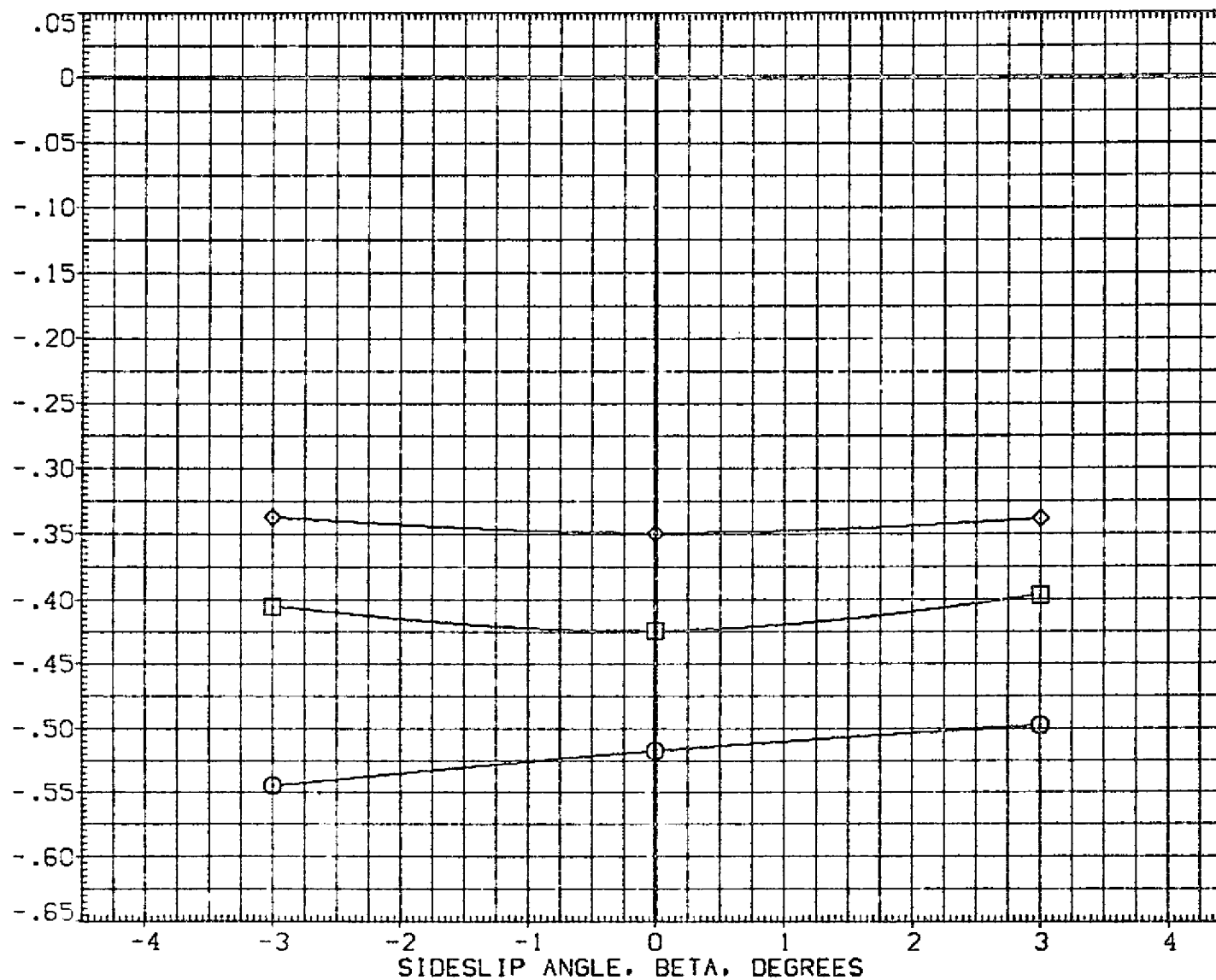


FIGURE 89. AMPLIFICATION FACTOR IN YAW, N85 JETS

SYMBOL	T/GA-1	PARAMETRIC VALUES
○	47.500	MACH 10.330 ALPHA 35.000
□	95.000	BOFLAP .000 T/GA 95.000
◇	190.000	NOJET 2.000 ELEVON .000

REFERENCE INFORMATION		
SREF	2680.0000	50.67
LREF	474.8000	INCHES
BREF	936.6800	INCHES
XMR	1074.7000	IN. X0
YMR	.0000	IN. Y0
ZMR	375.0000	IN. Z0
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - NORMAL FORCE, N(NF)

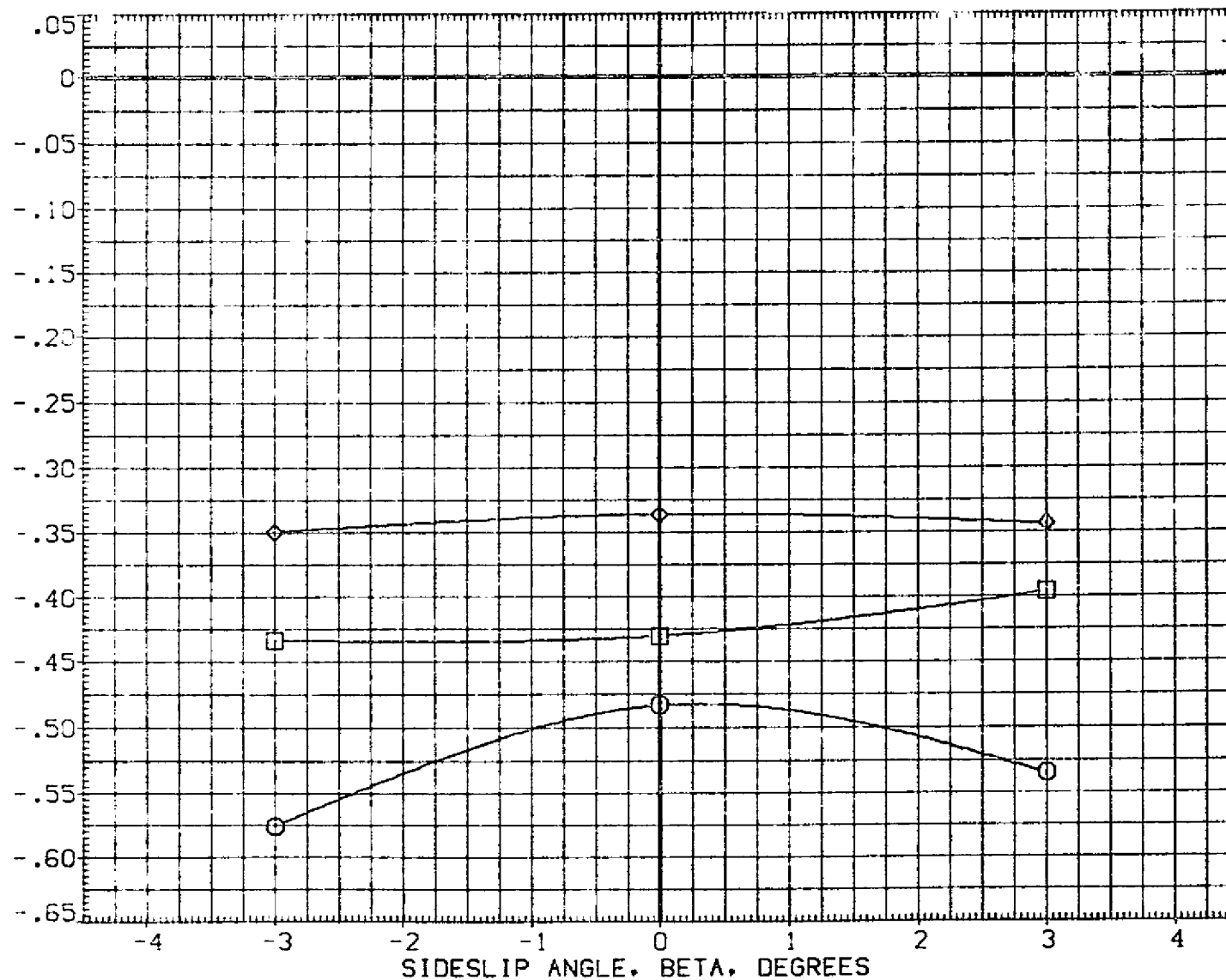


FIGURE 89. AMPLIFICATION FACTOR IN YAW, N85 JETS

01N85

LARC CFHT 118 (MA-22)

(CJA119)

SYMBOL	T/OA-1	MACH	PARAMETRIC VALUES		
○	47.500		10.330	ALPHA	-10.000
□	95.000	BDFLAP	.000	T/OA	95.000
◇	190.000	NO.JET	2.000	ELEVON	.000

REFERENCE INFORMATION		
SREF	2690.0000	50.FT.
LREF	474.8000	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - AXIAL FORCE, N(AF)

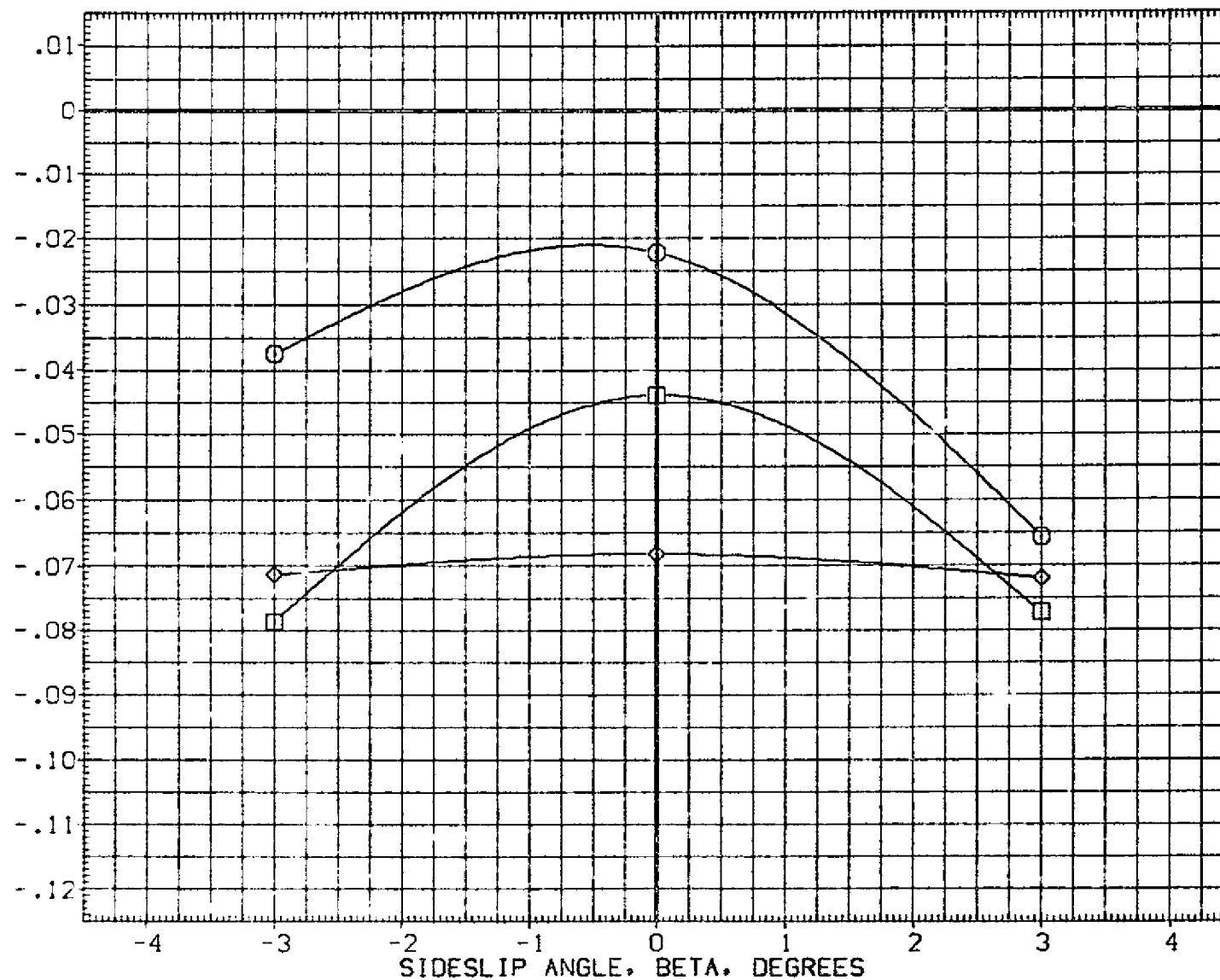


FIGURE 89. AMPLIFICATION FACTOR IN YAW, N85 JETS

SYMBOL	T/QA-1	PARAMETRIC VALUES
○	47.500	MACH 10.330 ALPHA .000
□	95.000	BOFLAP .000 T/QA 95.000
◇	190.000	NOJET 2.000 ELEVON .000

REFERENCE INFORMATION		
SREF	2690.0000	SQ. FT.
LREF	174.8000	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SEAL	.0100	

RCS JET AMPLIFICATION FACTOR - AXIAL FORCE, N(AF)

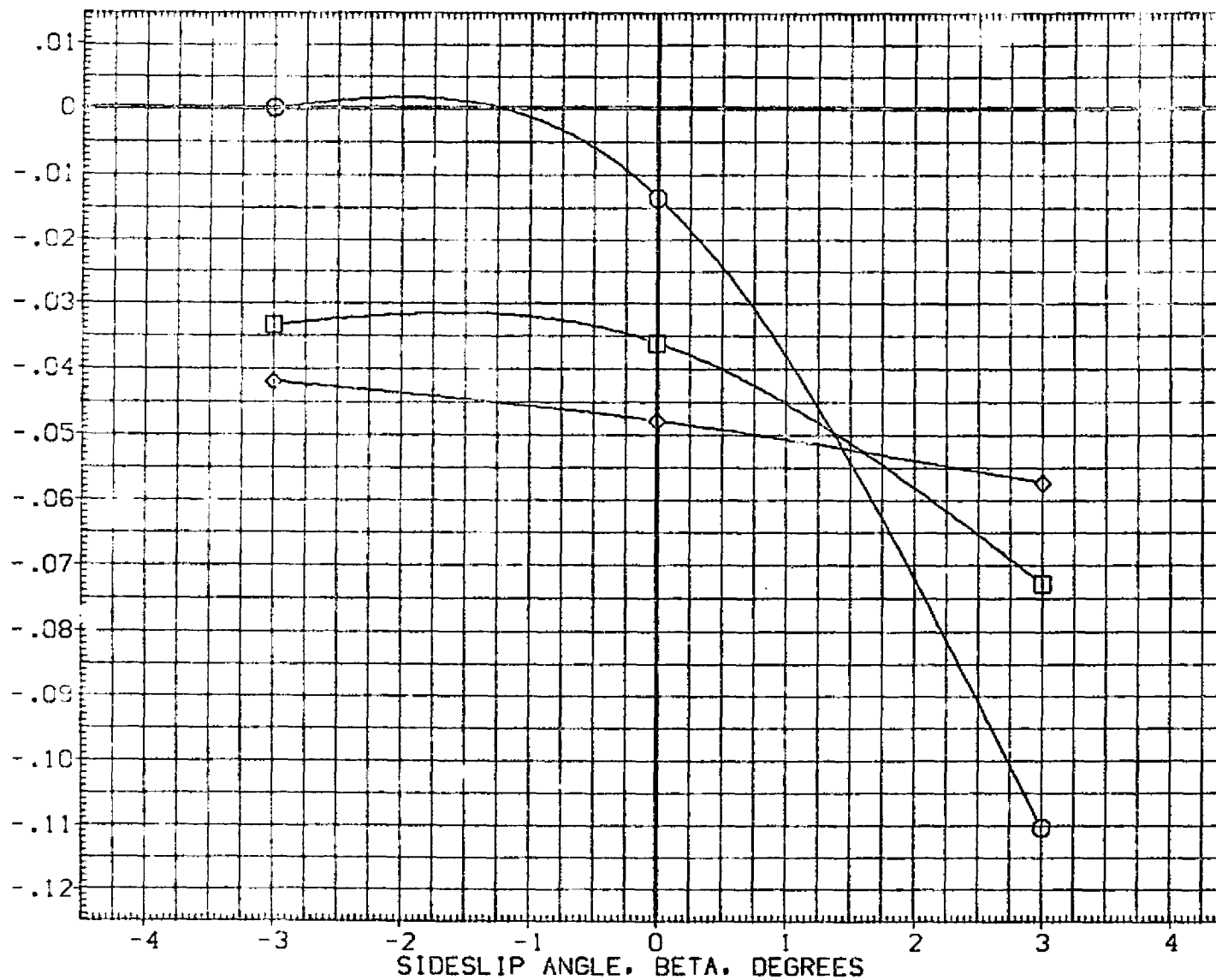


FIGURE 89. AMPLIFICATION FACTOR IN YAW, N85 JETS

01N85

LARC CFHT 118 (MA-22)

(CJA119)

SYMBOL	T/QA-1	MACH	PARAMETRIC VALUES	ALPHA	T/QA
○	47.500	10.330	10.000	10.000	95.000
□	95.000	BDFLAP	.000	10.000	95.000
◇	150.000	NO.JET	2.000	ELEVON	.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8000	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - AXIAL FORCE, N(AF)

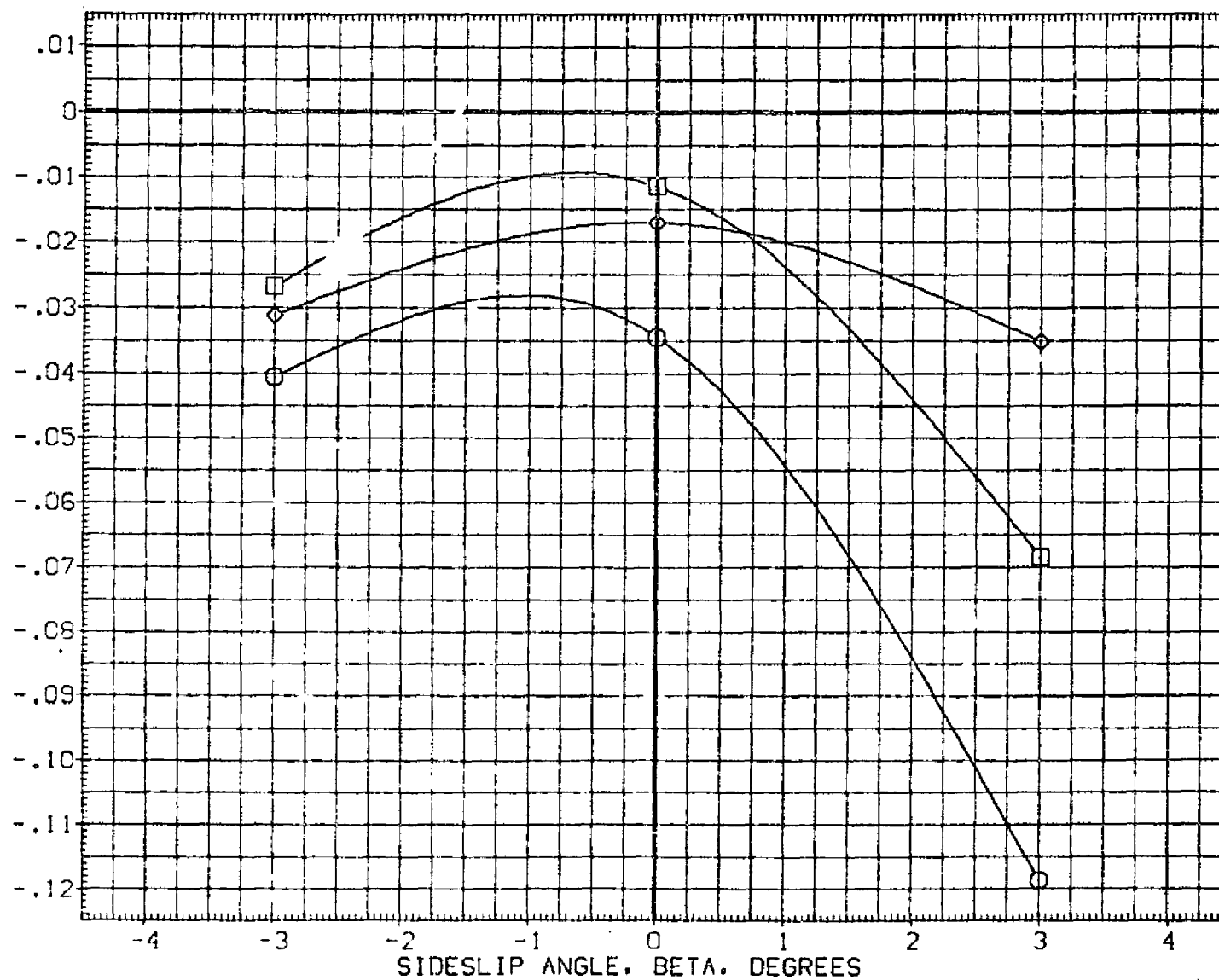


FIGURE 89. AMPLIFICATION FACTOR IN YAW, N85 JETS

SYMBOL



T/OA-1

47.500

MACH

PARAMETRIC VALUES

10.330

ALPHA

20.000

BDFLAP

.000

T/OA

95.000

NO. JET

.000

ELEVON

.000

REFERENCE INFORMATION

SREF

2690.0000

59 FT.

LREF

474.8000

1 INCHES

BREF

936.6800

1 INCHES

XMRP

1076.7000

IN. X0

YMRP

.0000

IN. Y0

ZMRP

375.0000

IN. Z0

SCALE

.0100

RCS JET AMPLIFICATION FACTOR - AXIAL FORCE, N(AF)

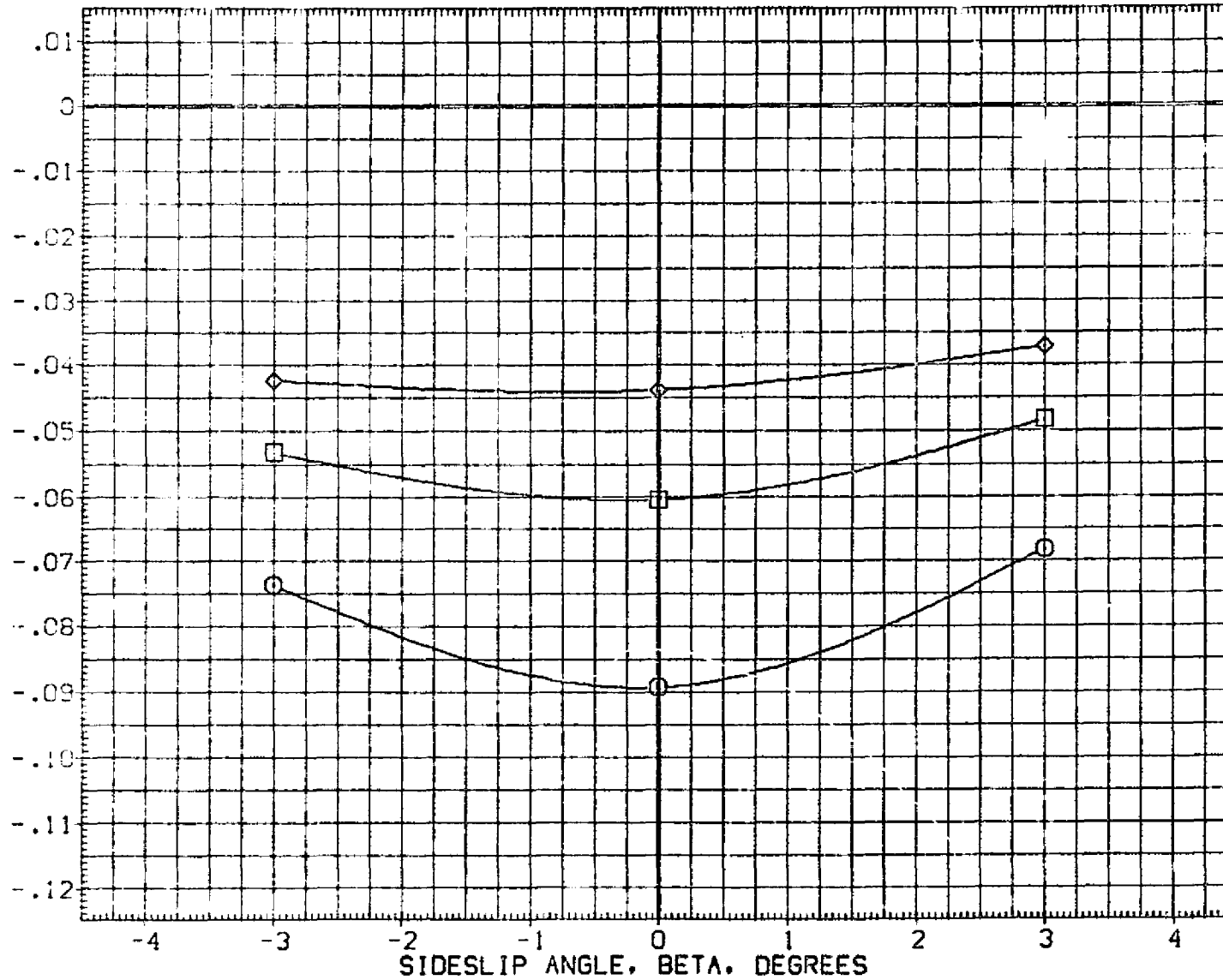


FIGURE 89. AMPLIFICATION FACTOR IN YAW, N85 JETS

01N85

LARC CFHT 118 (MA-22)

(CJA119)

SYMBOL

T/QA-1

MACH

PARAMETRIC VALUES

10.330

ALPHA

35.000

47.500

BD FLAP

.000

T/QA

95.000

95.000

NO. JET

2.000

ELEVON

.000

◇

REFERENCE INFORMATION

SREF 2690.0000

SQ. FT.

LREF 474.8000

INCHES

BREF 935.6800

INCHES

XMRP 1076.7000

IN. X0

YMRP .0000

IN. Y0

ZMRP 375.0000

IN. Z0

SCALE .0100

RCS JET AMPLIFICATION FACTOR - AXIAL FORCE, N(AF)

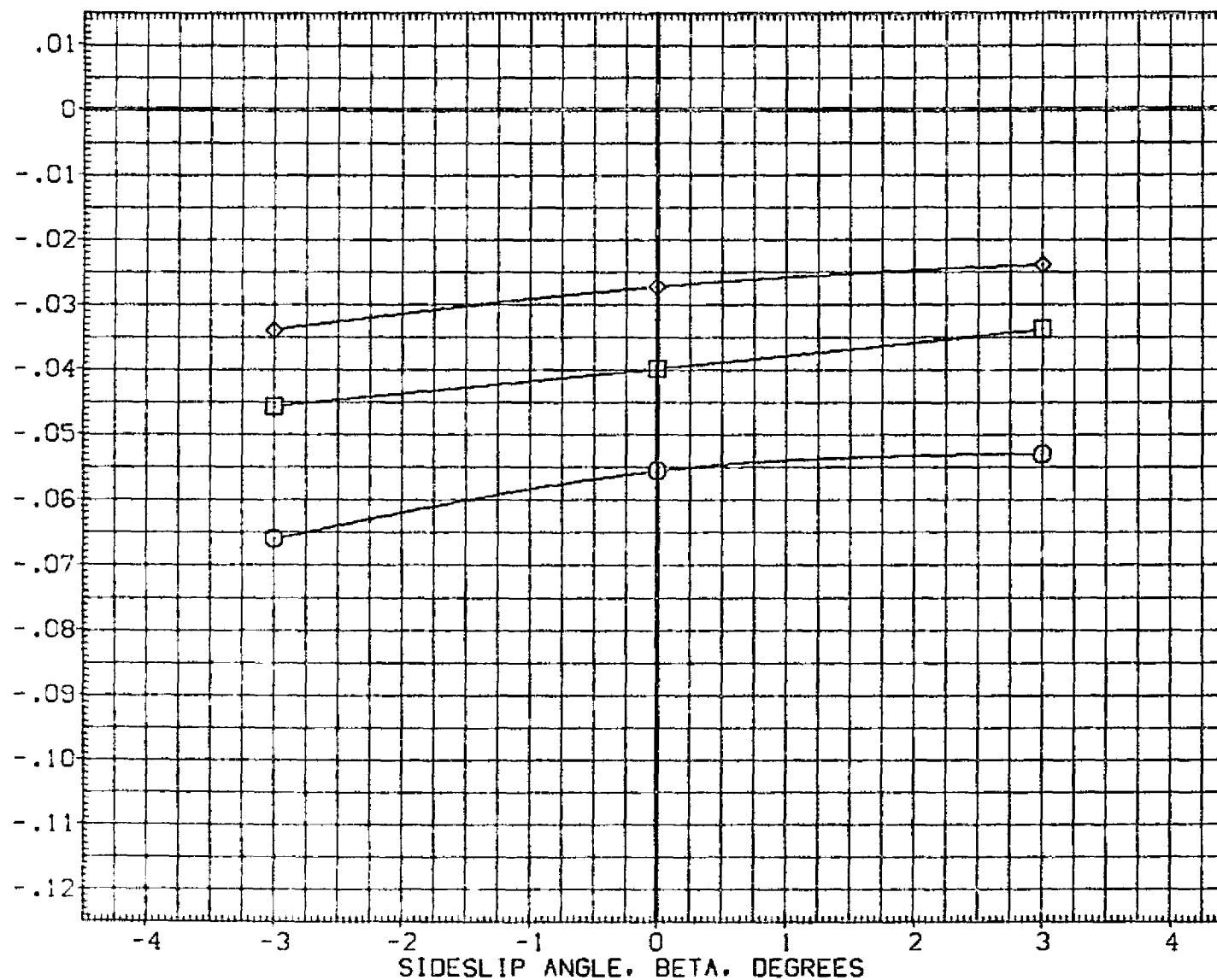


FIGURE 89. AMPLIFICATION FACTOR IN YAW, N85 JETS

SYMBOL	T/OA-1	PARAMETRIC VALUES
○	47.500	MACH 10.330 ALPHA -10.000
□	95.000	BDFLAP .000 T/OA 95.000
◇	190.000	NO JET 2.000 ELEVON .000

REFERENCE INFORMATION		
SREF	2690.0000	SQ. FT.
LREF	474.8000	INCHES
BREF	336.6800	INCHES
XMPP	1076.7000	IN. YU
YMPP	.0000	IN. YU
ZMPP	375.0000	IN. ZU
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - SIDE FORCE, N(SF)

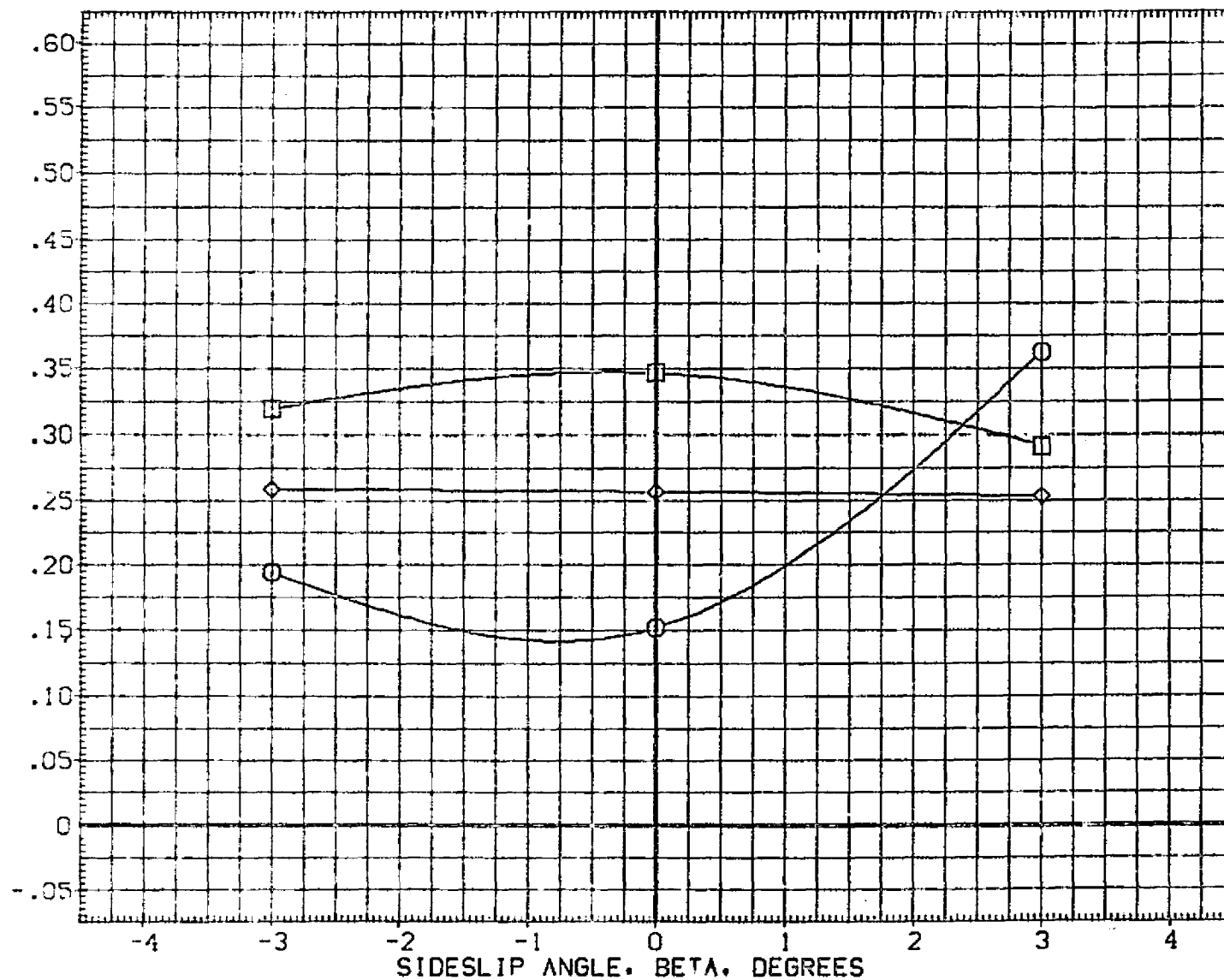


FIGURE 89. AMPLIFICATION FACTOR IN YAW, N85 JETS

01N95

LARC CFHT 118 (MA-22)

(CJA119)

SYMBOL	T/QA-1	PARAMETRIC VALUES
○	47.500	MACH 10.330 ALPHA .000
□	95.000	BDFLAP .000 T/QA 95.000
◇	190.000	NO.JET 2.000 ELEVON .000

REFERENCE INFORMATION		
SREF	2690.0000	SG.FT.
LREF	474.8000	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - SIDE FORCE, N(SF)

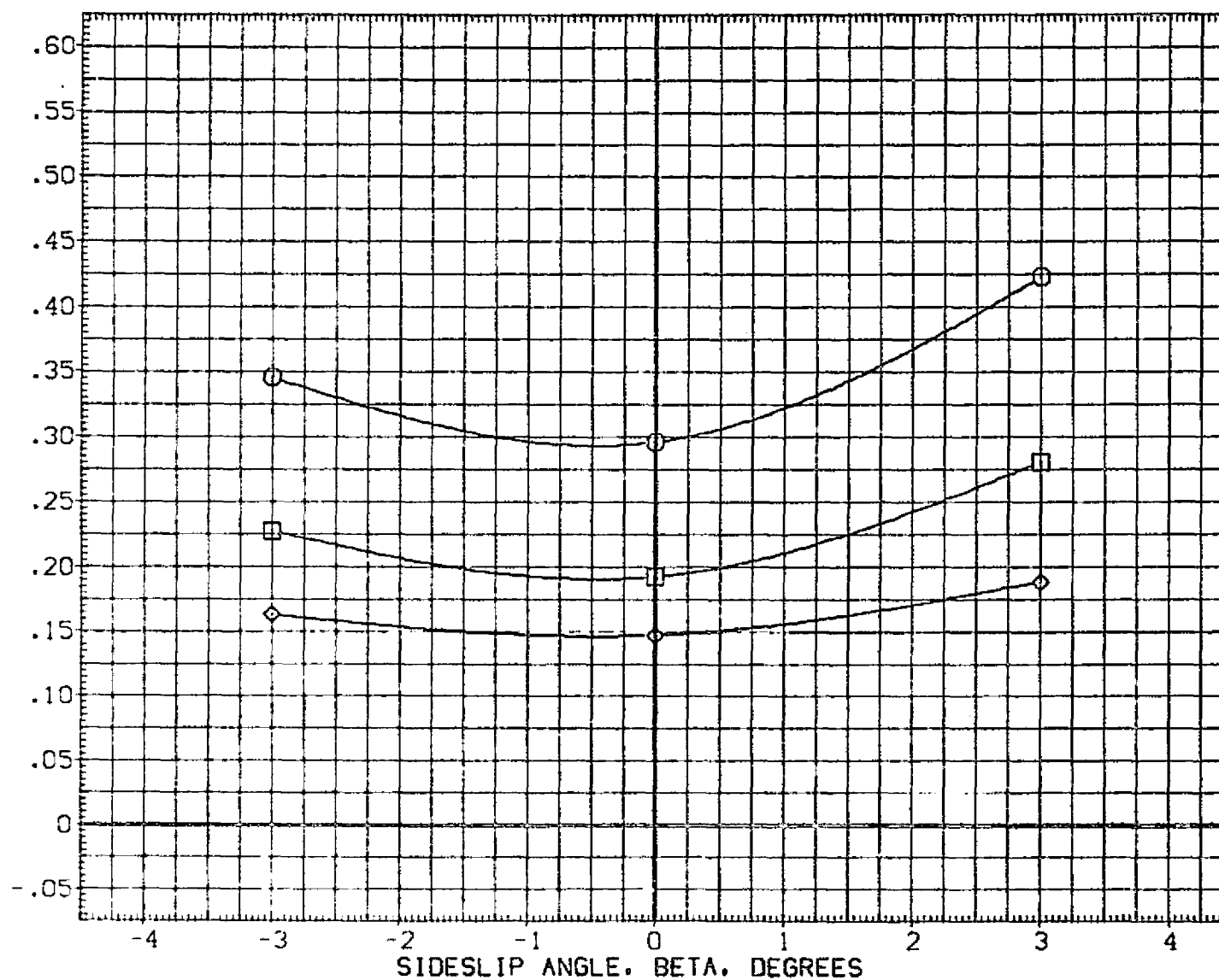


FIGURE 89. AMPLIFICATION FACTOR IN YAW, N85 JETS

SYMBOL	T/QA-1	PARAMETRIC VALUES			
○	47.500	MACH	10.330	ALPHA	10.000
□	95.000	BDFLAP	.000	T/QA	95.000
◇	190.000	NOJET	2.000	ELEVON	.000

REFERENCE INFORMATION

SREF	2690.0000	50. FT.
LREF	474.8000	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	INCHES
YMRP	.0000	INCHES
ZMRP	375.0000	INCHES
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - SIDE FORCE, N(SF)

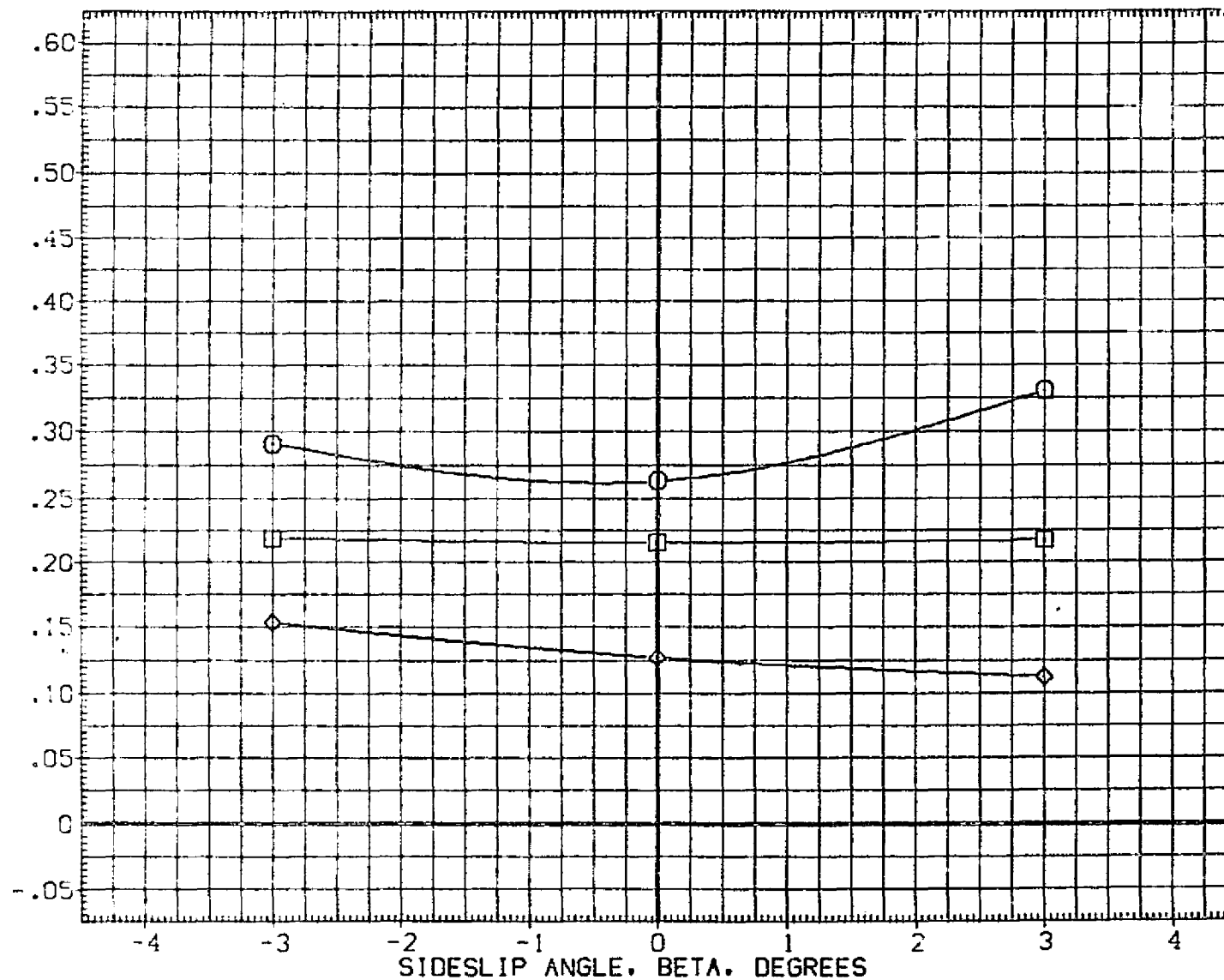


FIGURE 89. AMPLIFICATION FACTOR IN YAW, N85 JETS

01N85

LARC CFHT 118 (MA-22)

(CJA119)

SYMBOL

T/QA-1

PARAMETRIC VALUES

○

47.500

MACH

10.330

ALPHA

20.000

□

95.000

BDFLAP

.000

T/QA

95.000

◇

190.000

NOJET

2.000

ELEVON

.000

REFERENCE INFORMATION

SREF

2690.0000

50.FT.

LREF

474.8000

INCHES

BREF

936.6800

INCHES

XMRP

1076.7000

IN. X0

YMRP

.0000

IN. Y0

ZMRP

375.0000

IN. Z0

SCALE

.0100

RCS JET AMPLIFICATION FACTOR - SIDE FORCE, N(SF)

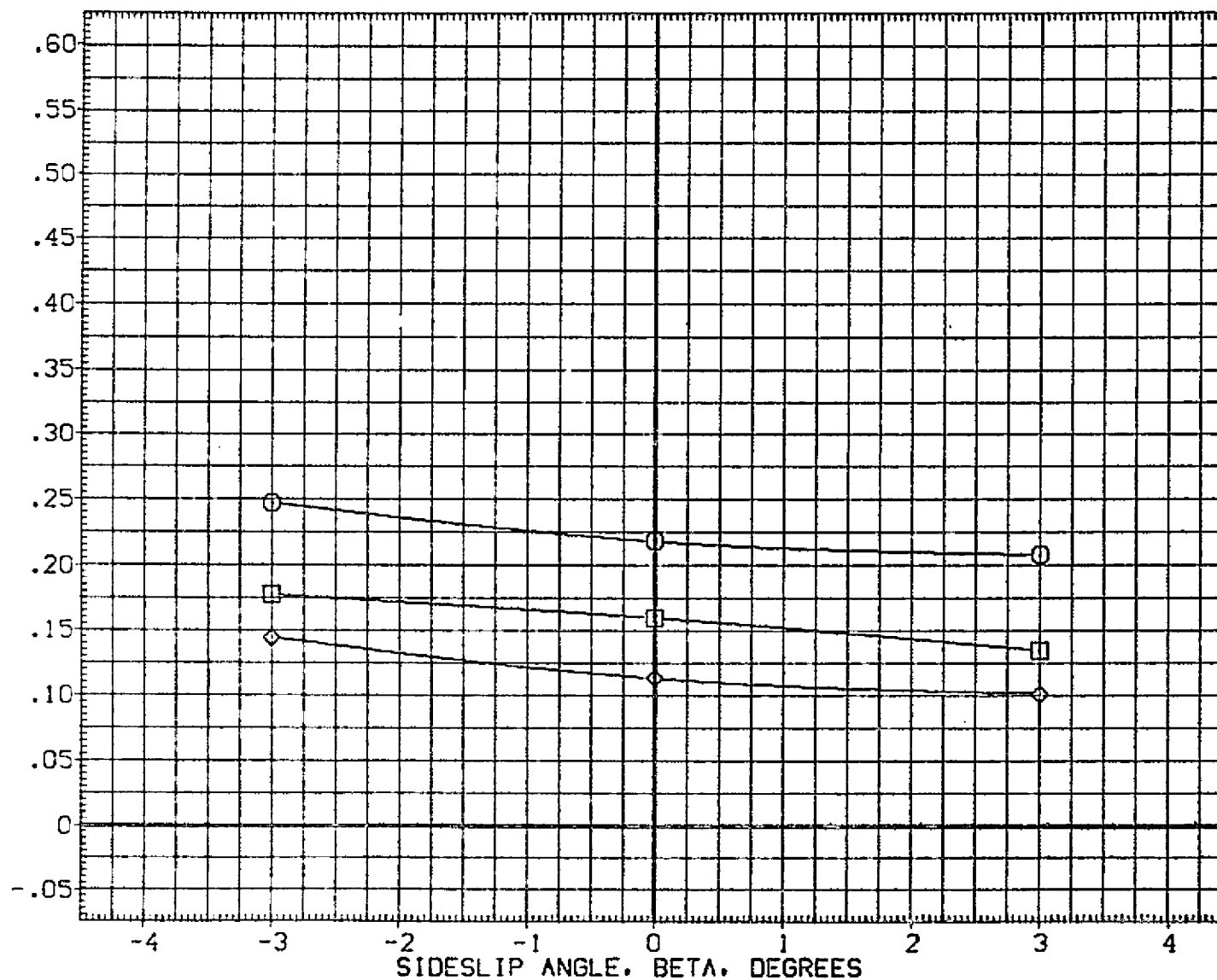


FIGURE 89. AMPLIFICATION FACTOR IN YAW, N85 JETS

SYMBOL	T/OA-1	MACH	PARAMETRIC VALUES	ALPHA	35.000
○	47.500	BOFLAP	.000	T/OA	95.000
□	95.000	NOJET	2.000	ELEVON	.000
◇	190.000				

REFERENCE INFORMATION		
SREF	2690.0000	SO. P
LREF	474.8000	IND. C
BREF	938.6800	IND. S
XMRP	1076.7000	IN. X3
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0100	

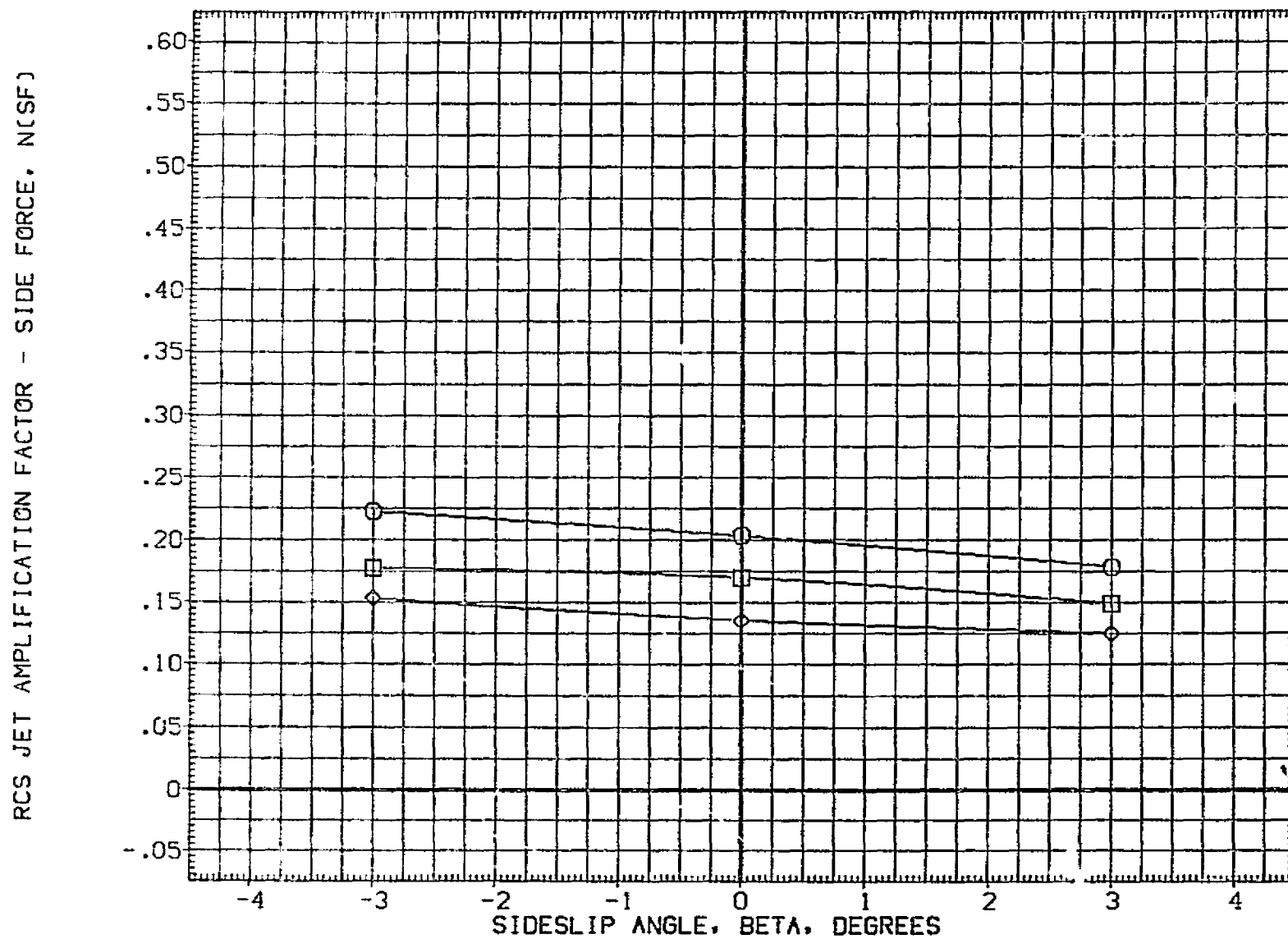


FIGURE 89. AMPLIFICATION FACTOR IN YAW, N85 JETS

SYMBOL	T/OA-1	PARAMETRIC VALUES			
○	47.500	MACH	10.330	ALPHA	-10.000
□	95.000	BDFLAP	.000	T/OA	95.000
◇	190.000	NO.JET	2.000	ELEVON	.000

REFERENCE INFORMATION		
SREF	2690.0000	50.FT.
LREF	474.8000	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - PITCH, N(PM)

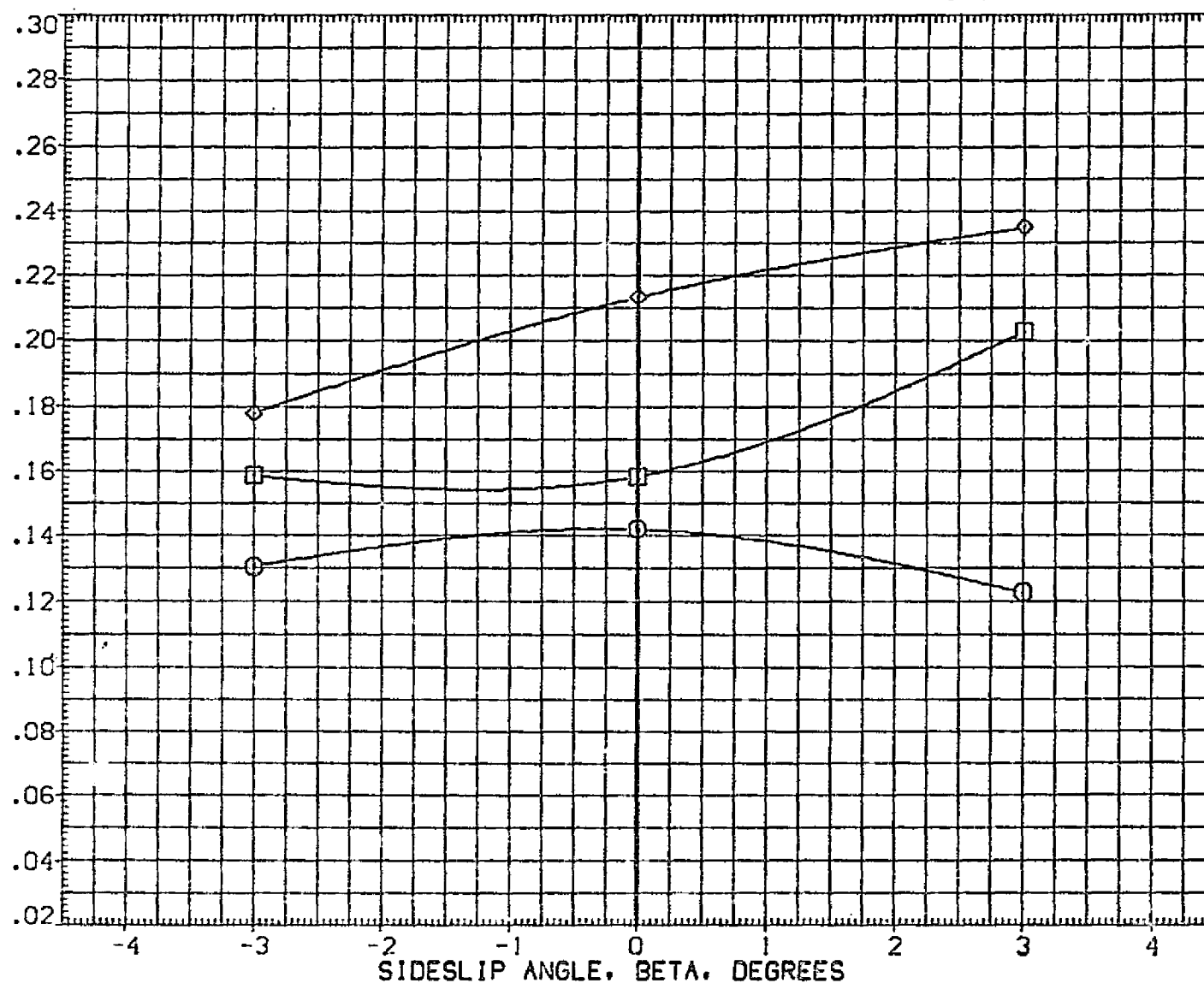


FIGURE 90. AMPLIFICATION FACTOR IN YAW, N79N78 JETS

SYMBOL	T/OA-1	PARAMETRIC VALUES
○	47.500	MACH 10.330 ALPHA .000
□	95.000	80FLAP .000 T/OA 95.000
◇	190.000	NOJET 2.000 ELEVON .000

REFERENCE INFORMATION		
SREF	2690.0000	50. FT.
LREF	474.0000	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. X
YMRP	.0000	IN. Y
ZMRP	375.0000	IN. Z
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - PITCH, N(PM)

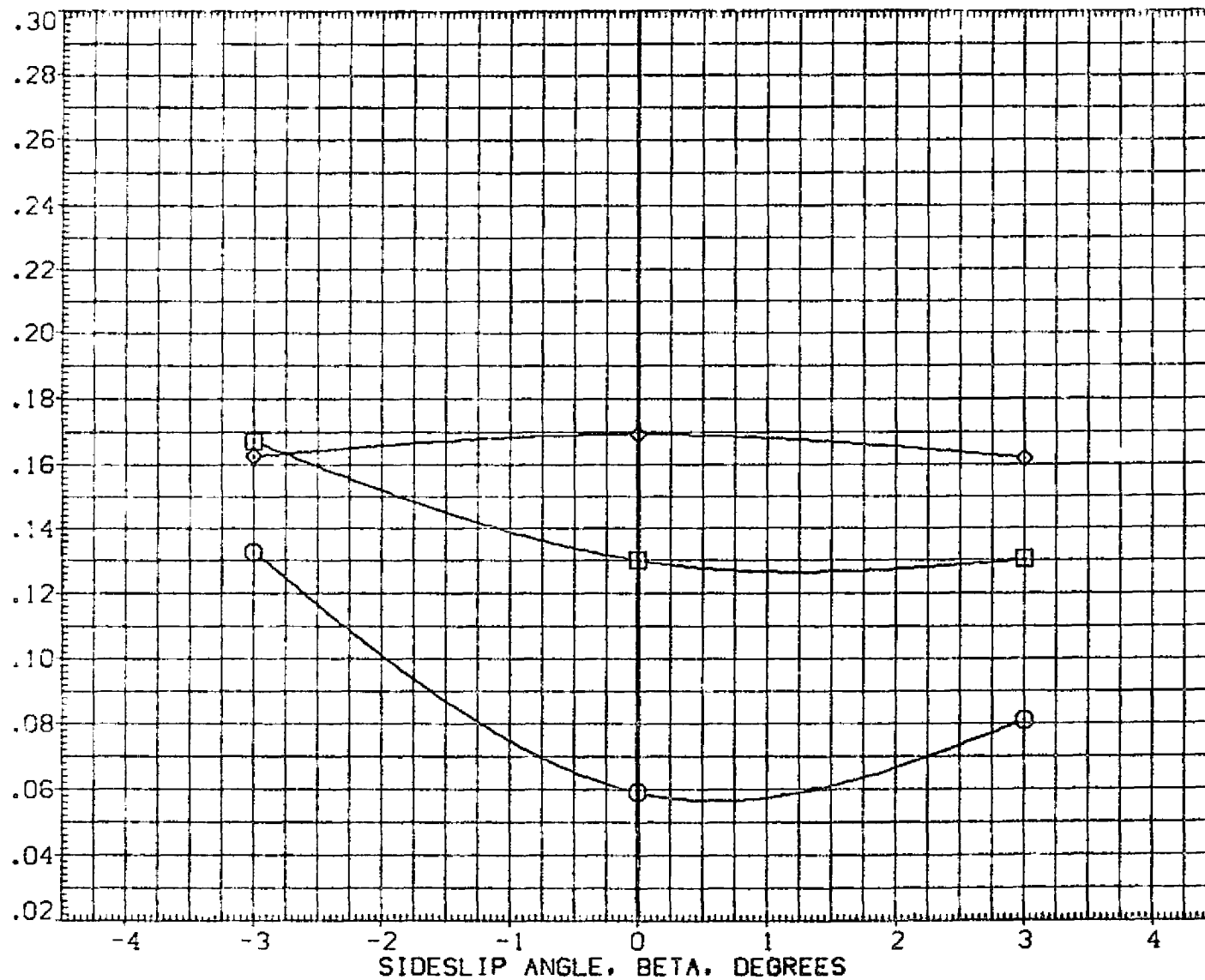


FIGURE 90. AMPLIFICATION FACTOR IN YAW, N79N78 JETS

SYMBOL	T/OA-1	PARAMETRIC VALUES
○	47.500	MACH 10.330 ALPHA 10.000
□	95.000	BOFLAP .000 T/OA 95.000
◇	190.000	NO.JET 2.000 ELEVON .000

REFERENCE INFORMATION		
SREF	2690.0000	50.FT.
LREF	474.8000	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - PITCH, NCPM)

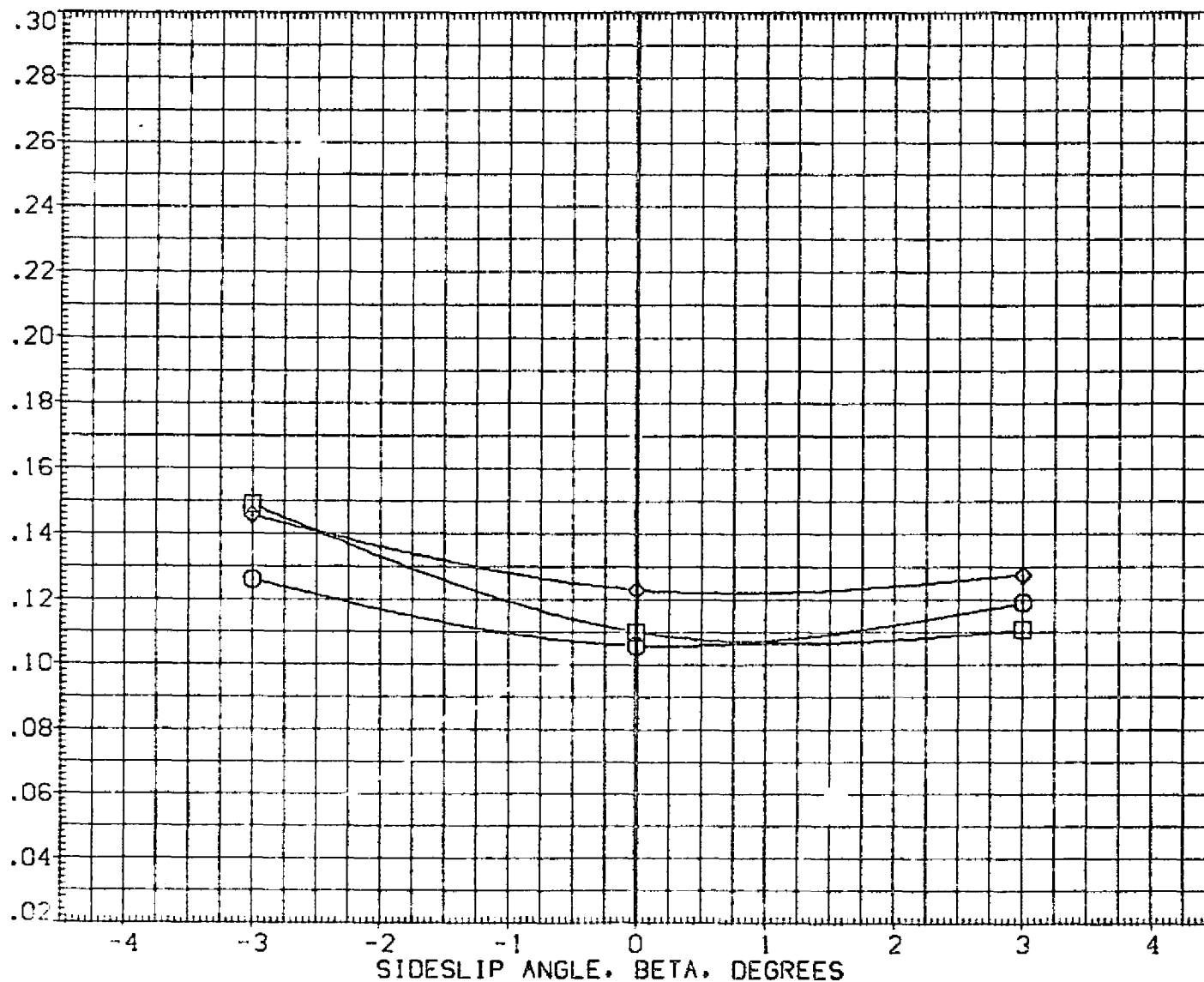


FIGURE 90. AMPLIFICATION FACTOR IN YAW, N79N78 JETS

SYMBOL	T/QA-1	PARAMETRIC VALUES			
○	47.500	MACH	10.330	ALPHA	20.000
□	95.000	BDFLAP	.000	T/QA	95.000
◇	190.000	NOJET	2.000	ELEVON	.000

REFERENCE INFORMATION		
SREF	2690.0000	50. FT
LREF	474.8000	INCHES
BREF	936.8600	INCHES
XMRP	1076.7000	IN. YL
YMRP	.0000	IN. YL
ZMRP	375.0000	IN. Z0
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - PITCH, N(PM)

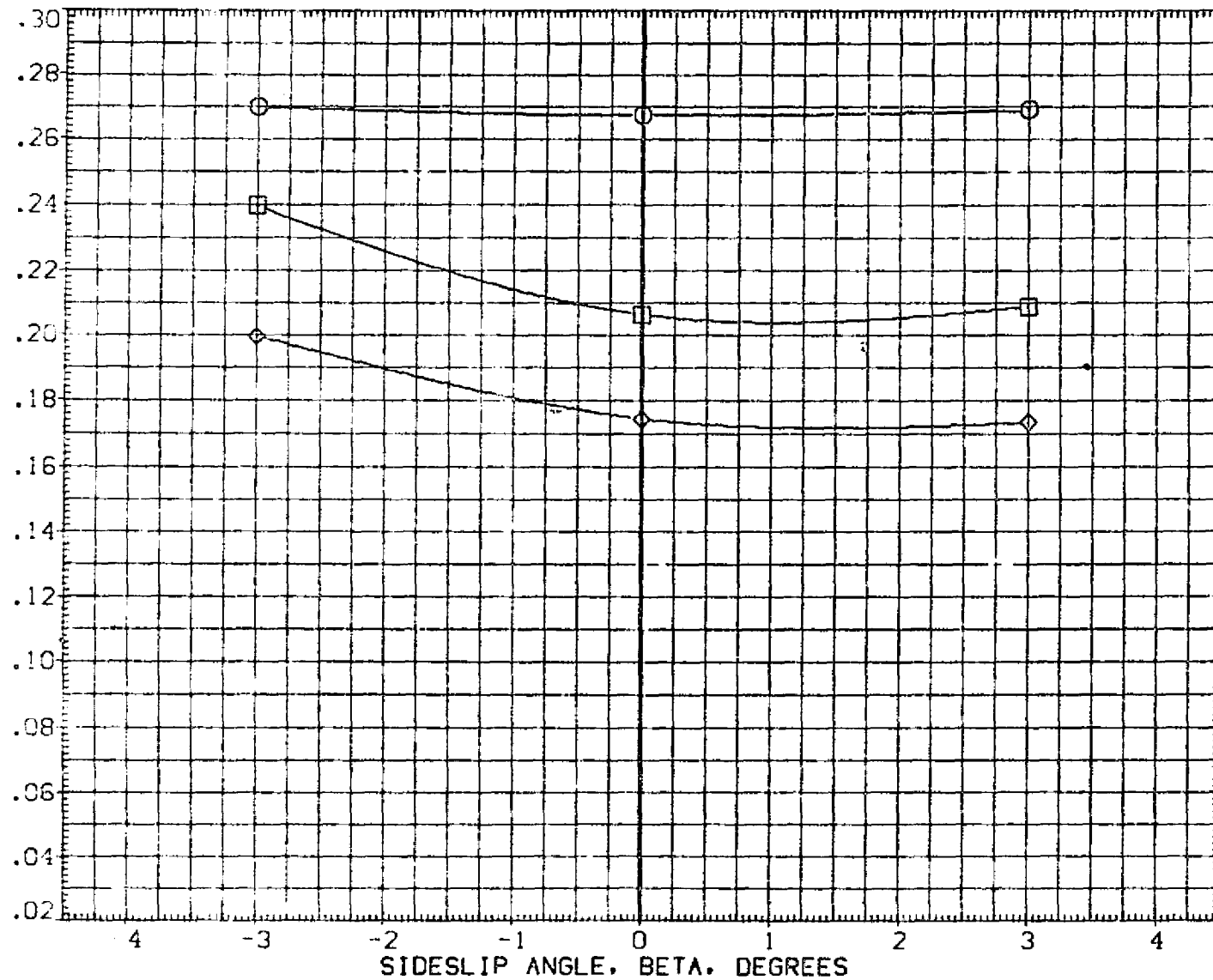


FIGURE 90. AMPLIFICATION FACTOR IN YAW, N79N78 JETS

SYMBOL	T/OA-1	PARAMETRIC VALUES			
○	47.500	MACH	10.330	ALPHA	35.000
□	95.000	BDFLAP	.000	T/OA	95.000
◇	190.000	NO.JET	2.000	ELEVON	.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8000	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - PITCH, N(CPM)

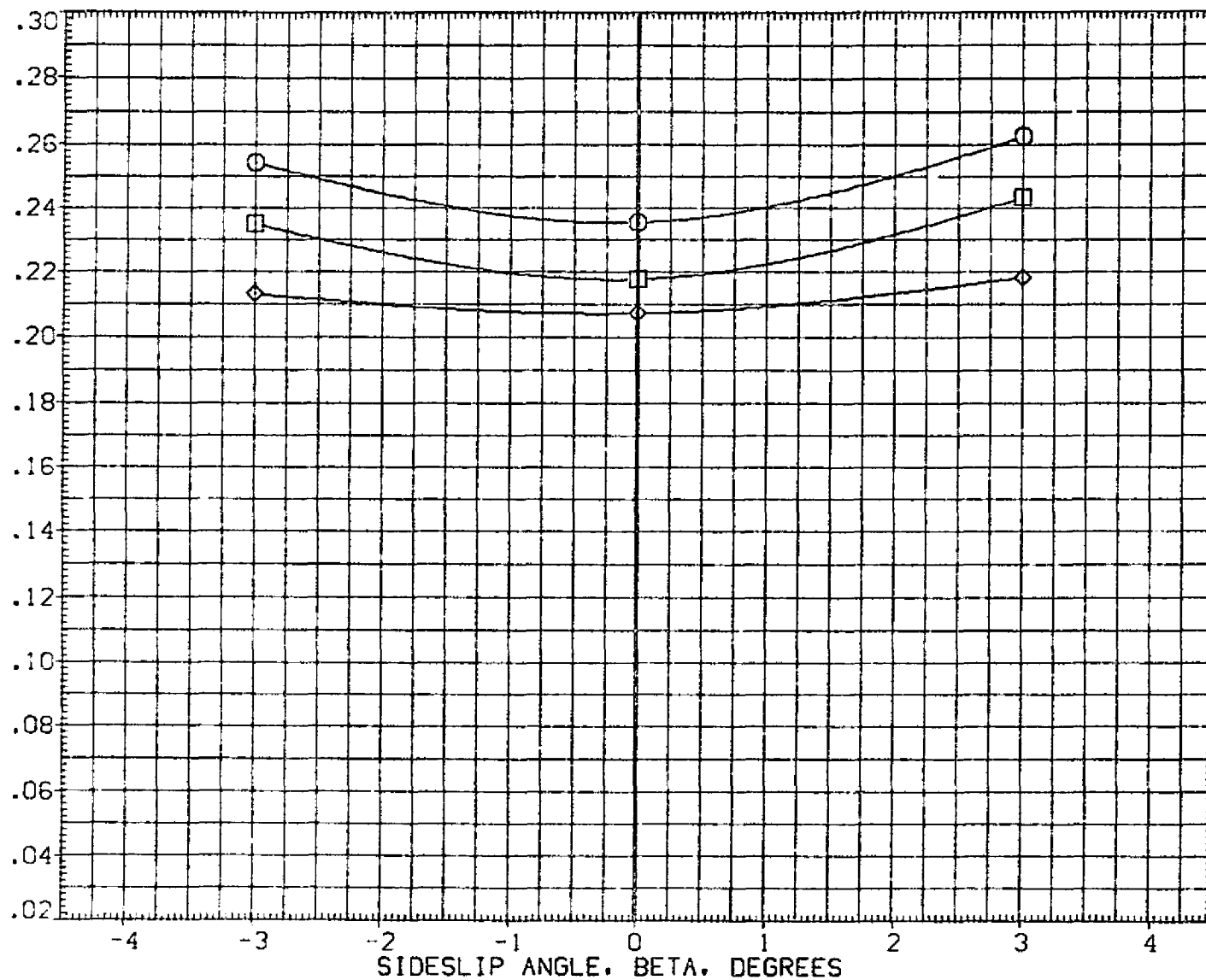


FIGURE 90. AMPLIFICATION FACTOR IN YAW, N79N78 JETS

SYMBOL	T/QA-1	PARAMETRIC VALUES
○	47.500	MACH 10.330 ALPHA -10.000
□	95.000	3DFLAP .000 T/QA 95.000
◇	190.000	NO.JET 2.000 ELEVON .000

REFERENCE INFORMATION		
SREF	2690.0000	50. FT.
LREF	474.0000	INCHES
BREF	936.0800	INCHES
XMRP	376.7000	IN. YD
YMRP	.0000	IN. YD
ZMRP	375.0000	IN. YD
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - ROLL, NCRM

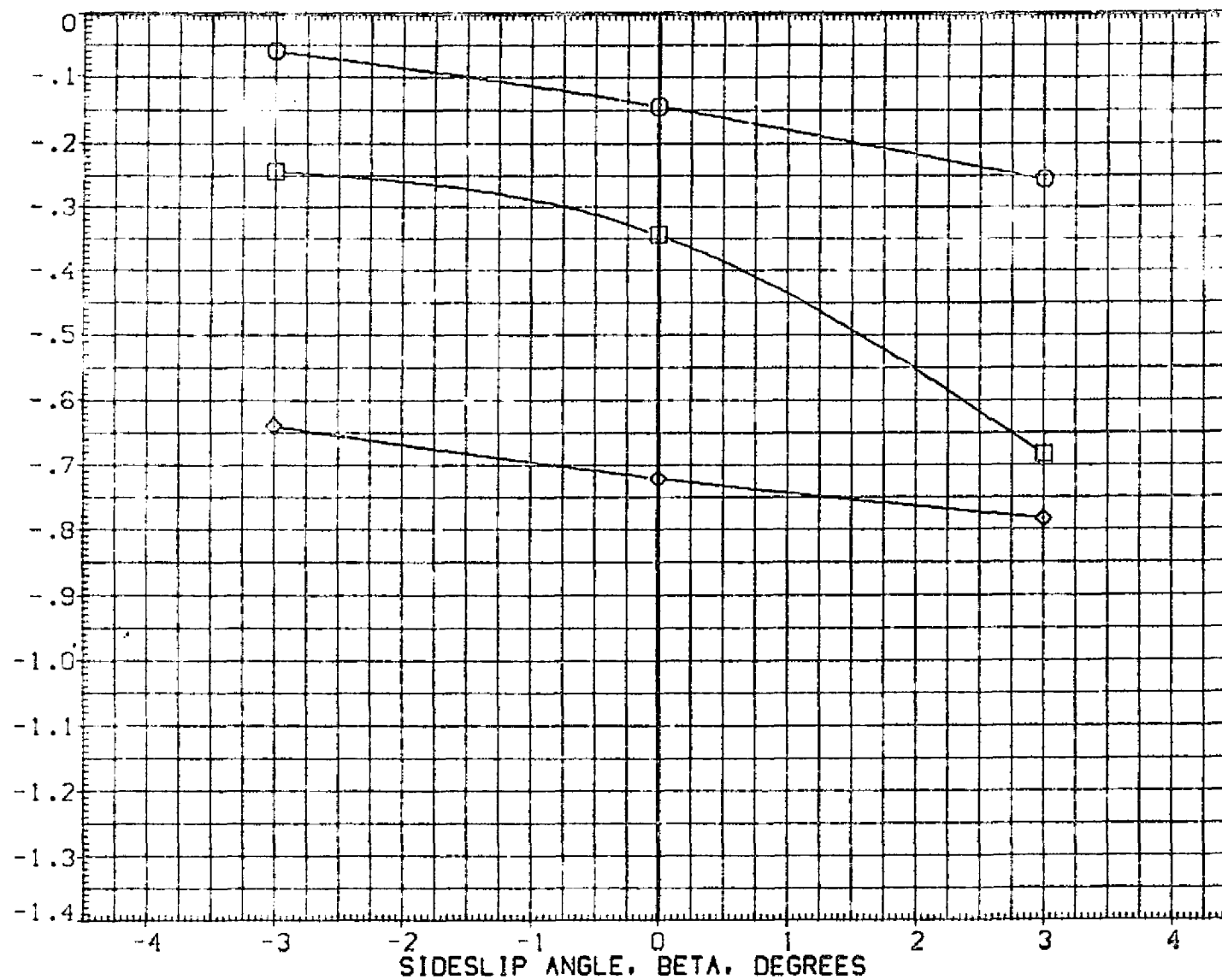


FIGURE 90. AMPLIFICATION FACTOR IN YAW, N79N78 JETS

SYMBOL	T/QA-1	PARAMETRIC VALUES
○	47.500	MACH 10.330 ALPHA .000
□	95.000	BDFLAP .000 T/QA 95.000
◇	190.000	NO JET 2.000 ELEVON .000

REFERENCE INFORMATION		
SREF	2690.0000	50. FT.
LREF	474.8000	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - ROLL, N(RM)

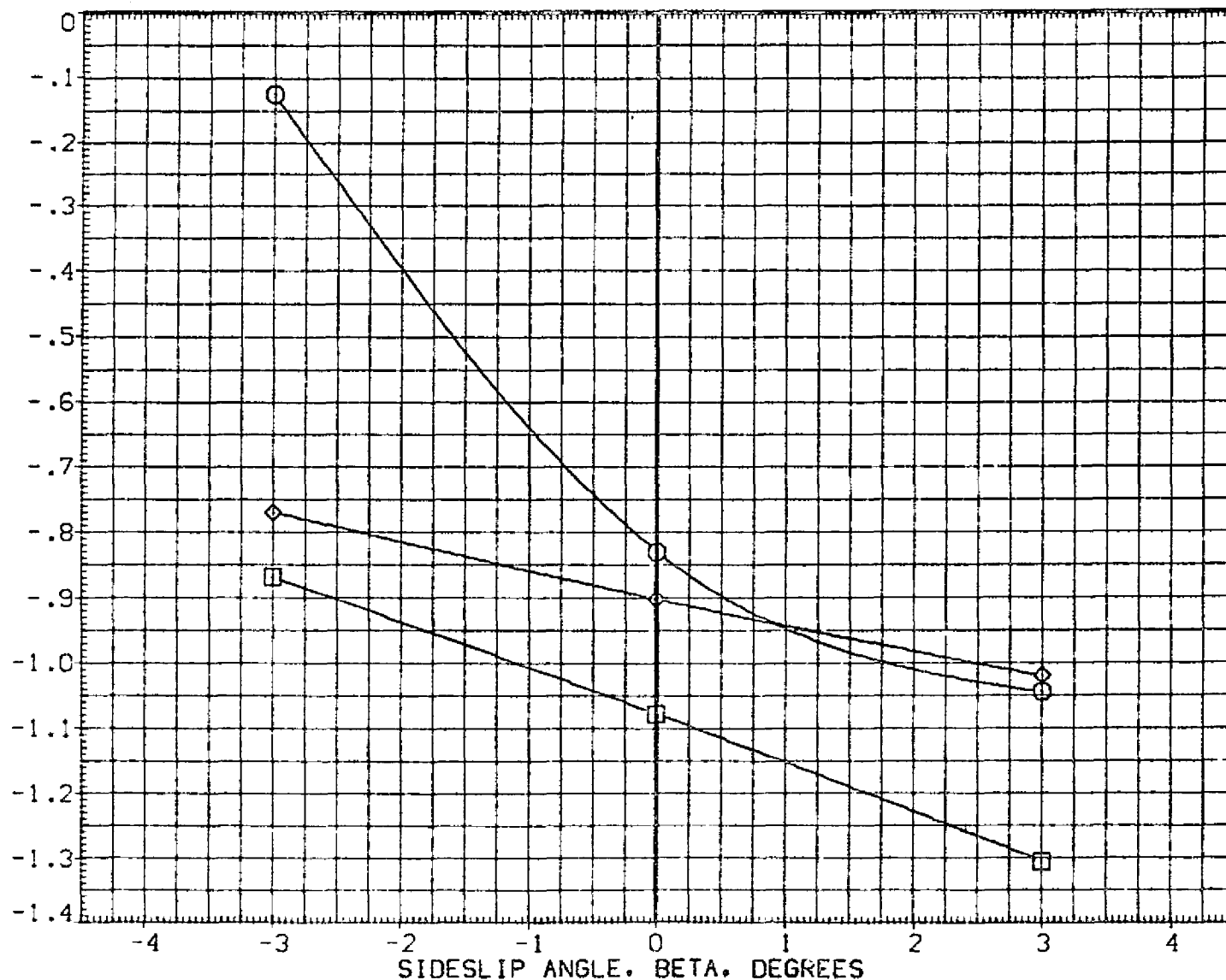


FIGURE 90. AMPLIFICATION FACTOR IN YAW, N79N78 JETS

SYMBOL		PARAMETRIC VALUES			
○	T/OA-1	MACH	10.330	ALPHA	10.000
□	95.000	BDFLAP	.000	T/OA	95.000
◇	190.000	NO.JET	2.000	ELEVON	.000

REFERENCE INFORMATION		
SREF	2690.0000	50.FT.
LREF	474.8000	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - ROLL, NCRM)

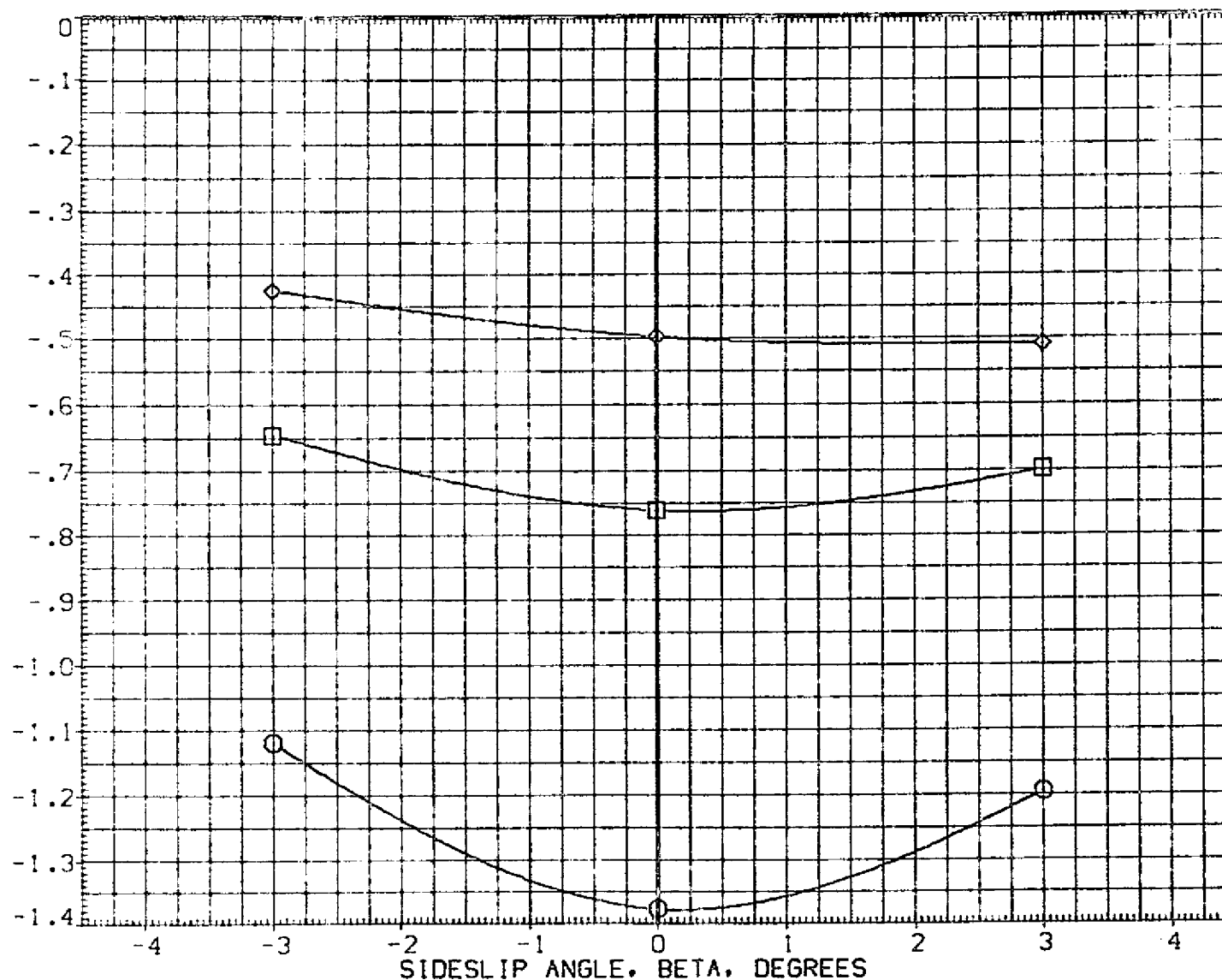


FIGURE 90. AMPLIFICATION FACTOR IN YAW, N79N78 JETS

SYMBOL	T/QA-1	PARAMETRIC VALUES
○	47.500	MACH 10.330 ALPHA 20.000
□	95.000	BOFLAP .000 T/QA 95.000
◇	190.000	NOJET 2.000 ELEVON .000

REFERENCE INFORMATION		
SREF	2690.0000	50.FT.
LREF	474.8000	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - ROLL, N(RM)

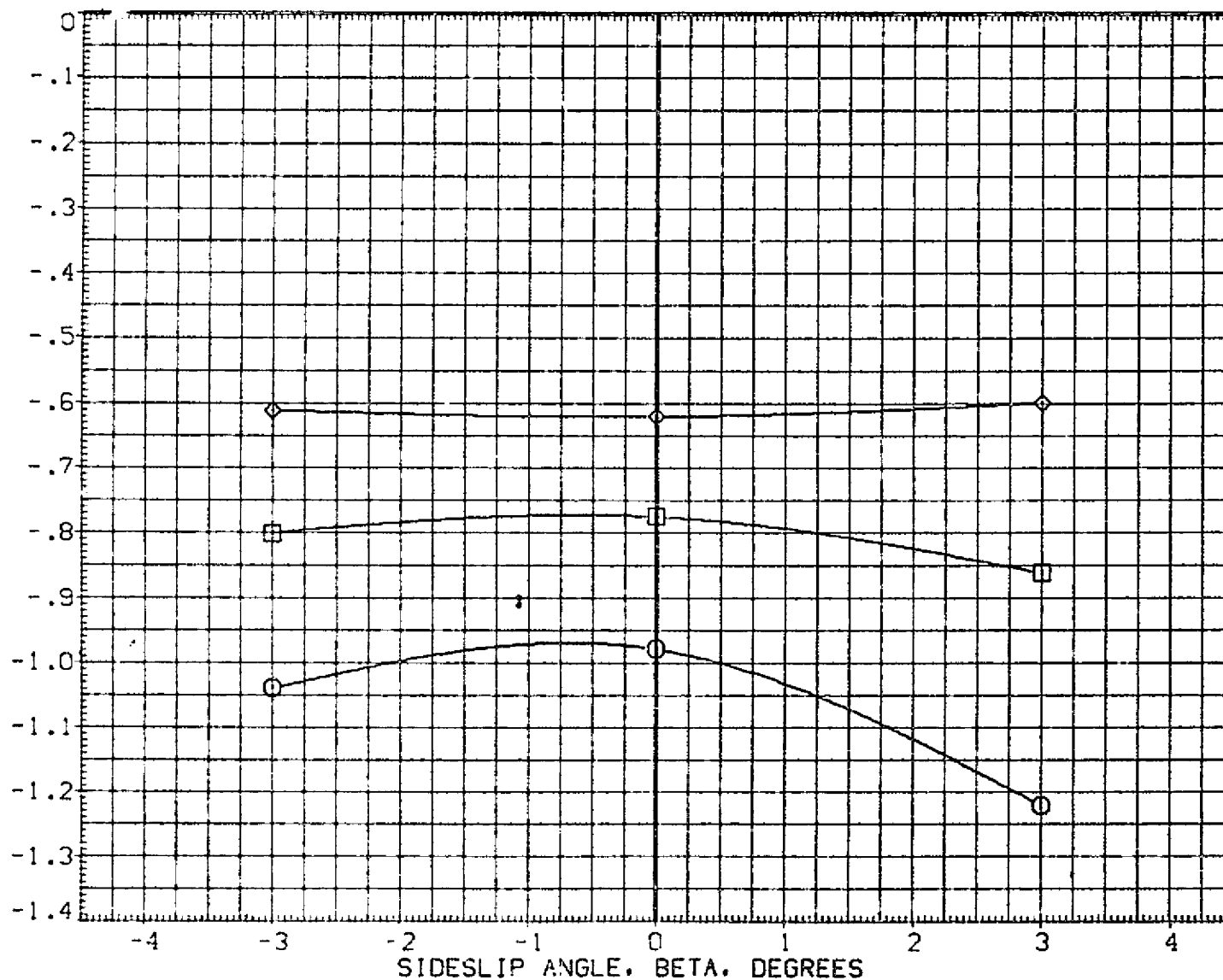


FIGURE 90. AMPLIFICATION FACTOR IN YAW, N79N78 JETS

SYMBOL	T/OA-1	PARAMETRIC VALUES
○	47,500	MACH 10.330 ALPHA 35.000
□	95,000	BDCLAP .000 T/OA 95.000
◇	190,000	NO JET 2.000 ELEVON .000

REFERENCE INFORMATION		
SREF	2690.0000	SC 7.
LREF	.74 .000	INC 15
BREF	956.5800	INCHES
XMRP	1376.7000	IN. 1
YMRP	.0000	IN. 10
ZMRP	375.0000	IN. 20
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - ROLL, N(RM)

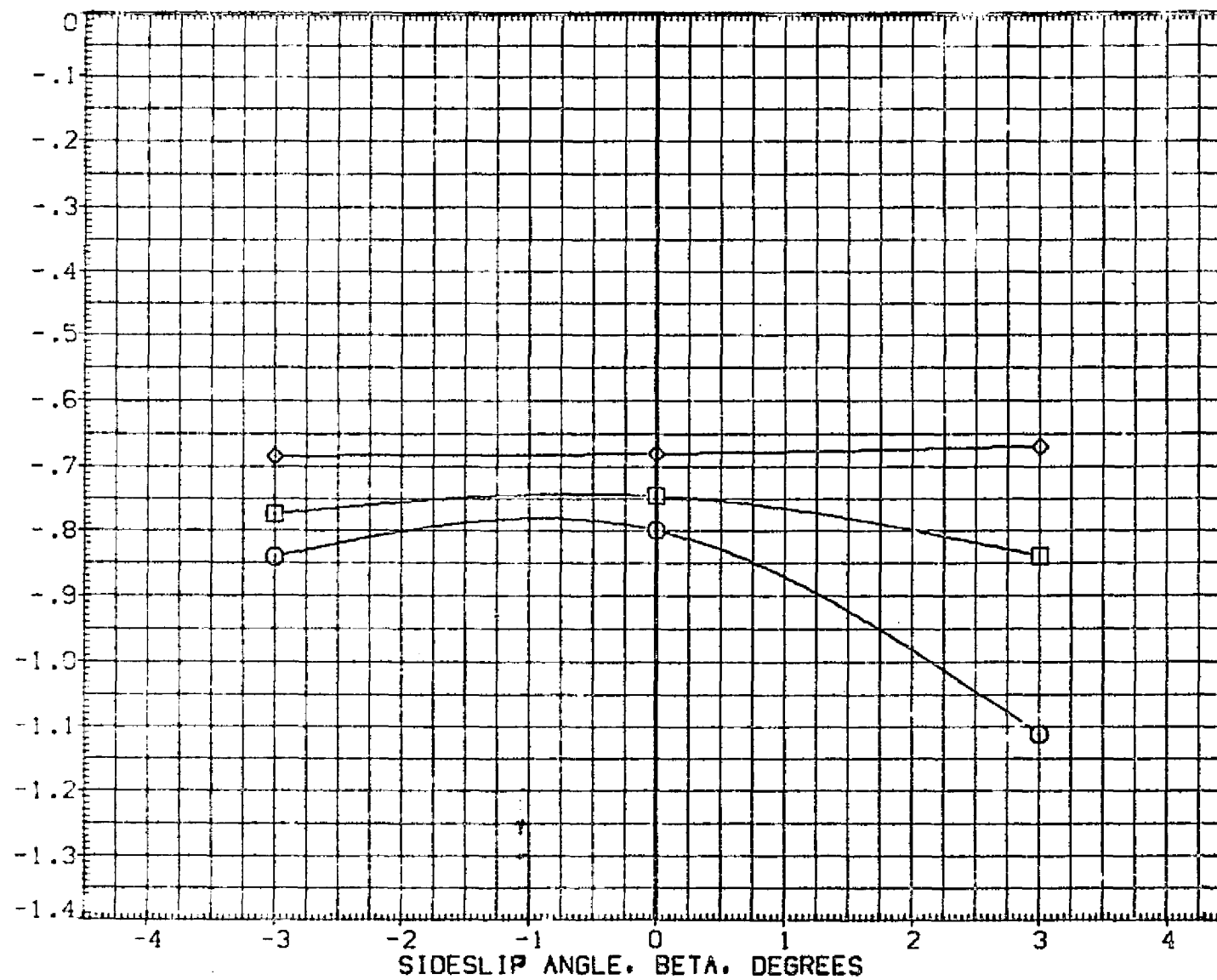


FIGURE 90. AMPLIFICATION FACTOR IN YAW, N79N78 JETS

SYMBOL	T/QA-1	PARAMETRIC VALUES
○	47.500	MACH 10.330 ALPHA -10.000
□	95.000	BDFLAP .000 T/QA 95.000
◇	190.000	NO. JET 2.000 ELEVON .000

REFERENCE INFORMATION		
SREF	2690.0000	SQ. FT.
LREF	474.8000	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - YAW, N(YM)

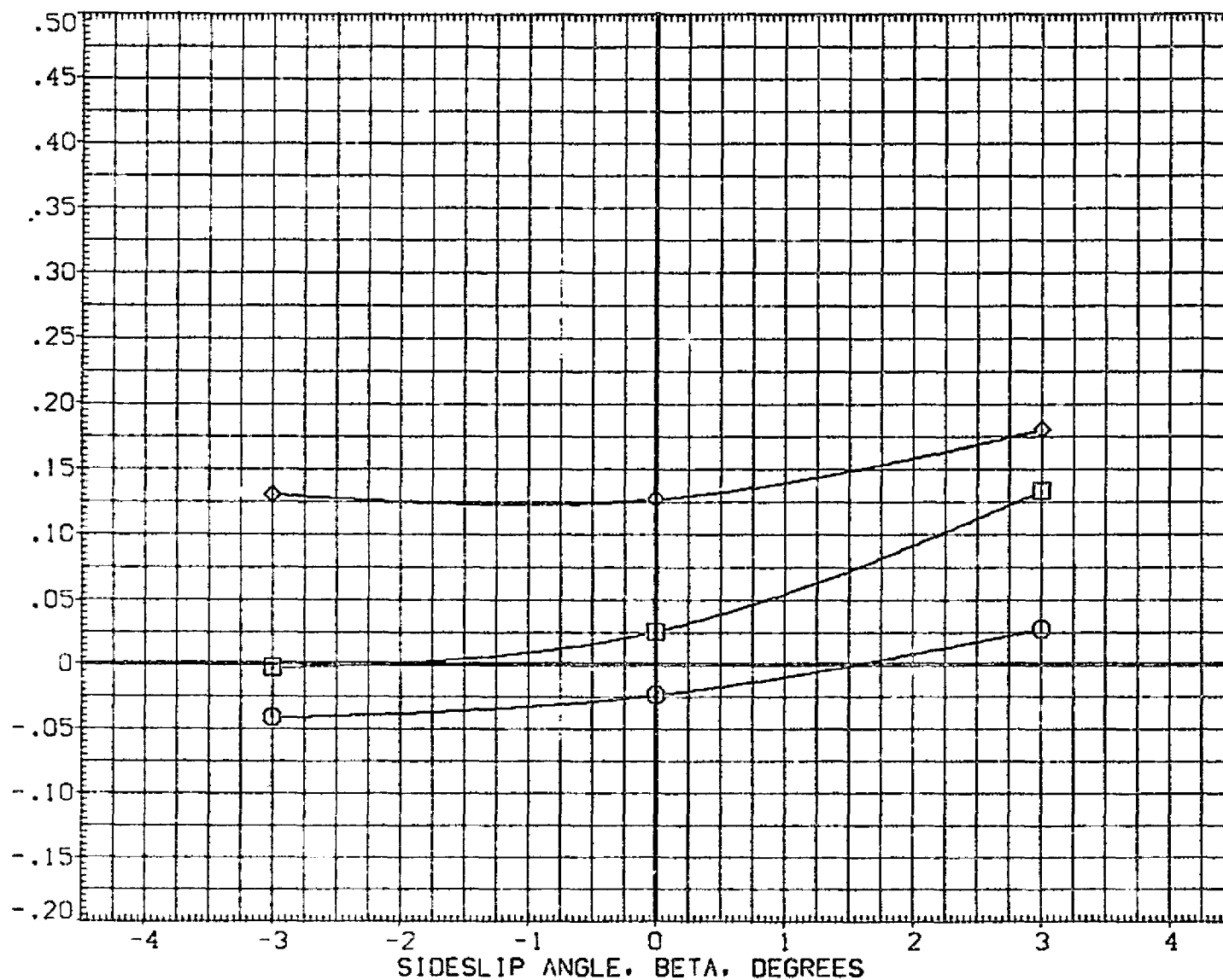


FIGURE 90. AMPLIFICATION FACTOR IN YAW, N79N78 JETS

SYMBOL	T/QA-1	PARAMETRIC VALUES
○	47.500	11ACH 10.330 ALPHA .000
□	95.000	BDCLAP .000 T/QA 95.000
◇	190.000	NO.JET 2.000 ELEVON .000

REFERENCE INFORMATION		
SREF	2690.0000	50.FT.
LREF	474.8000	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - YAW, N(CYM)

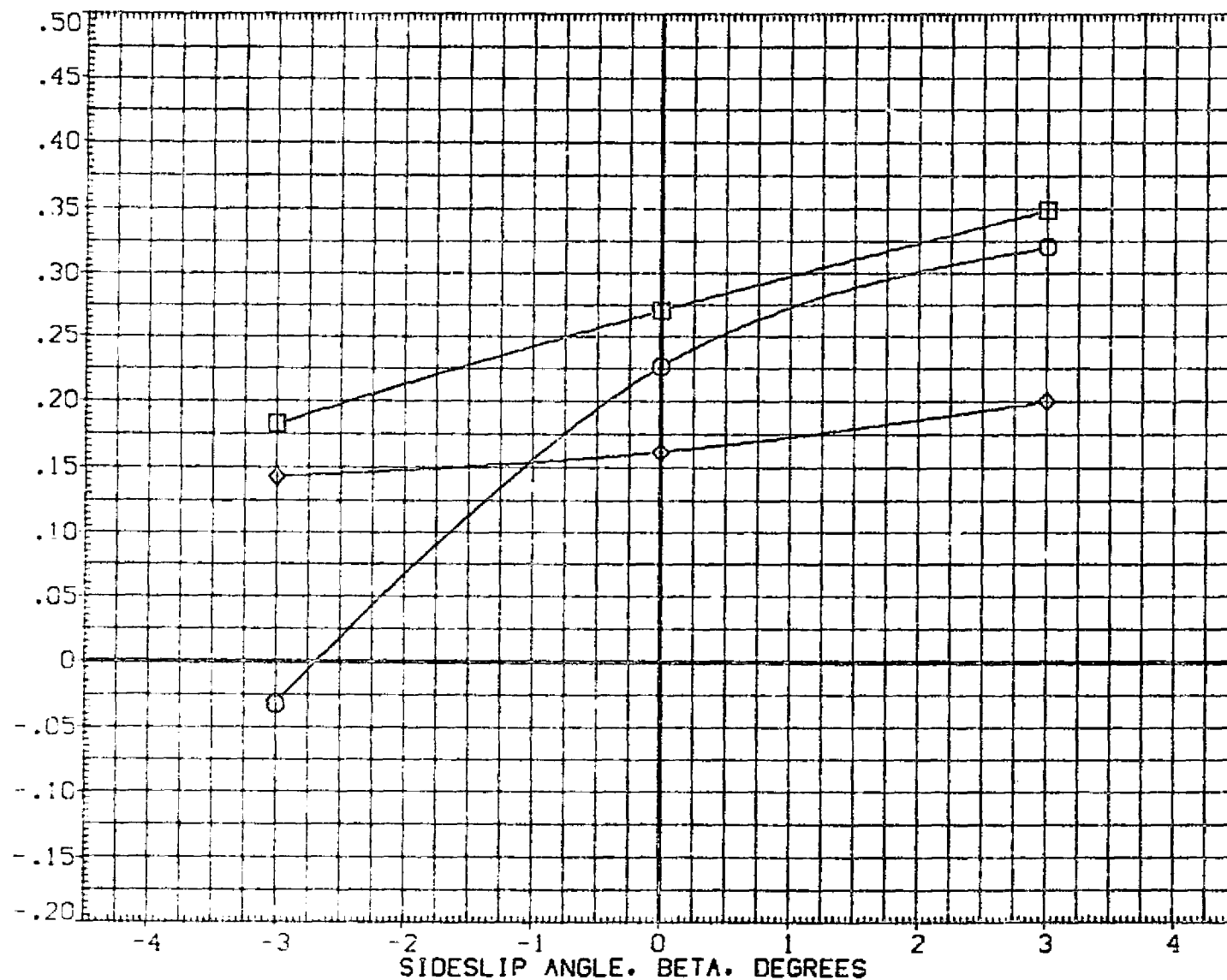


FIGURE 90. AMPLIFICATION FACTOR IN YAW, N79N78 JETS

SYMBOL	T/QA-1	PARAMETRIC VALUES			
○	47.500	MACH	10.330	ALPHA	10.000
□	95.000	BDFLAP	.000	T/QA	95.000
◇	190.000	NO.JET	2.000	ELEVON	.000

REFERENCE INFORMATION		
SREF	2690.0000	50.FT.
LREF	474.8000	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - YAW, N(YM)

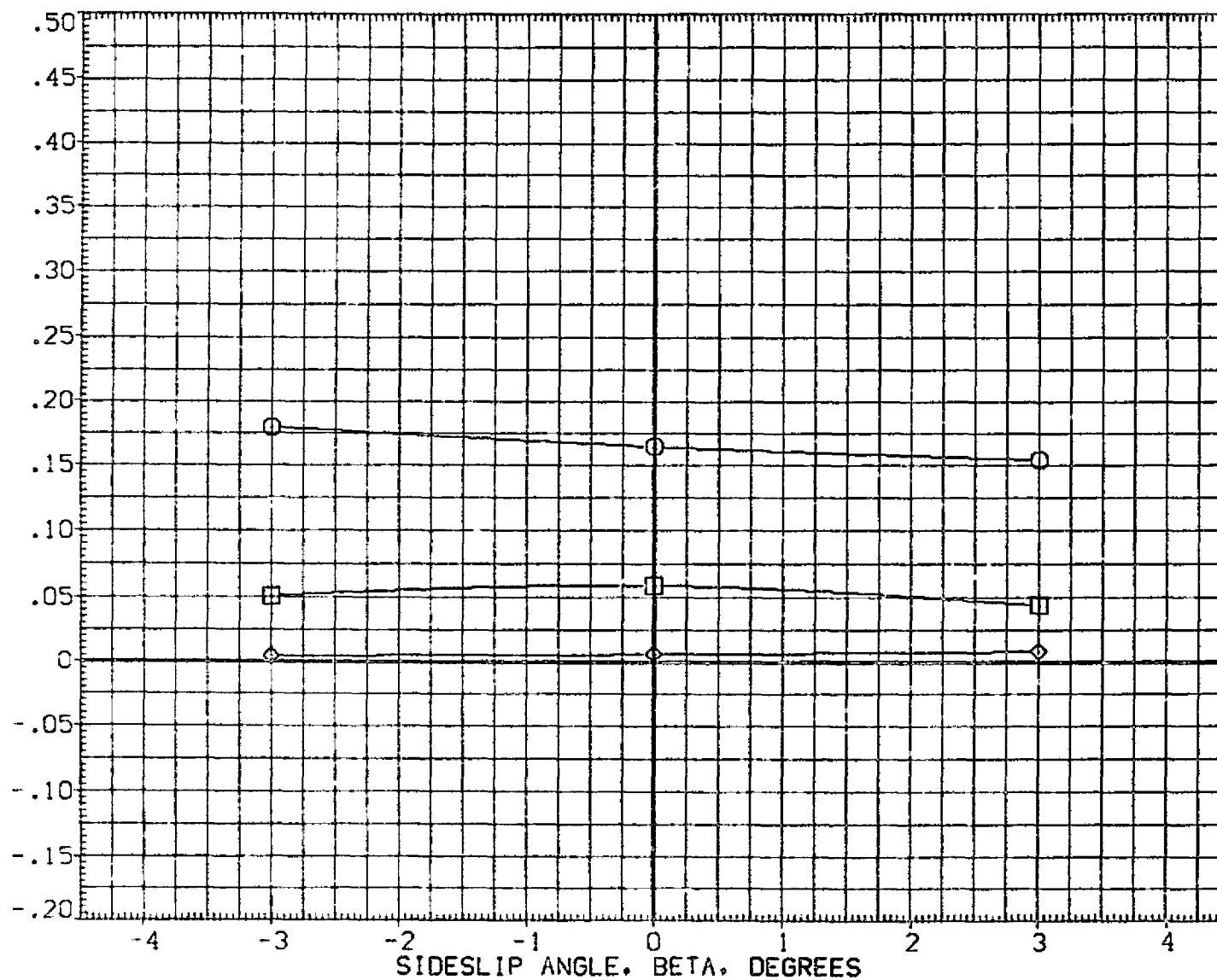


FIGURE 90. AMPLIFICATION FACTOR IN YAW, N79N78 JETS

SYMBOL	T/OA-1	MACH	PARAMETRIC VALUES	ALPHA	20.000
○	47.500	BDFLAP	.000	T/OA	95.000
□	95.000	NO JET	2.000	ELEVON	.000

REFERENCE INFORMATION		
SREF	2690.0000	50.FT.
LREF	474.8000	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	275.0000	IN. Z0
SCALE	.0100	

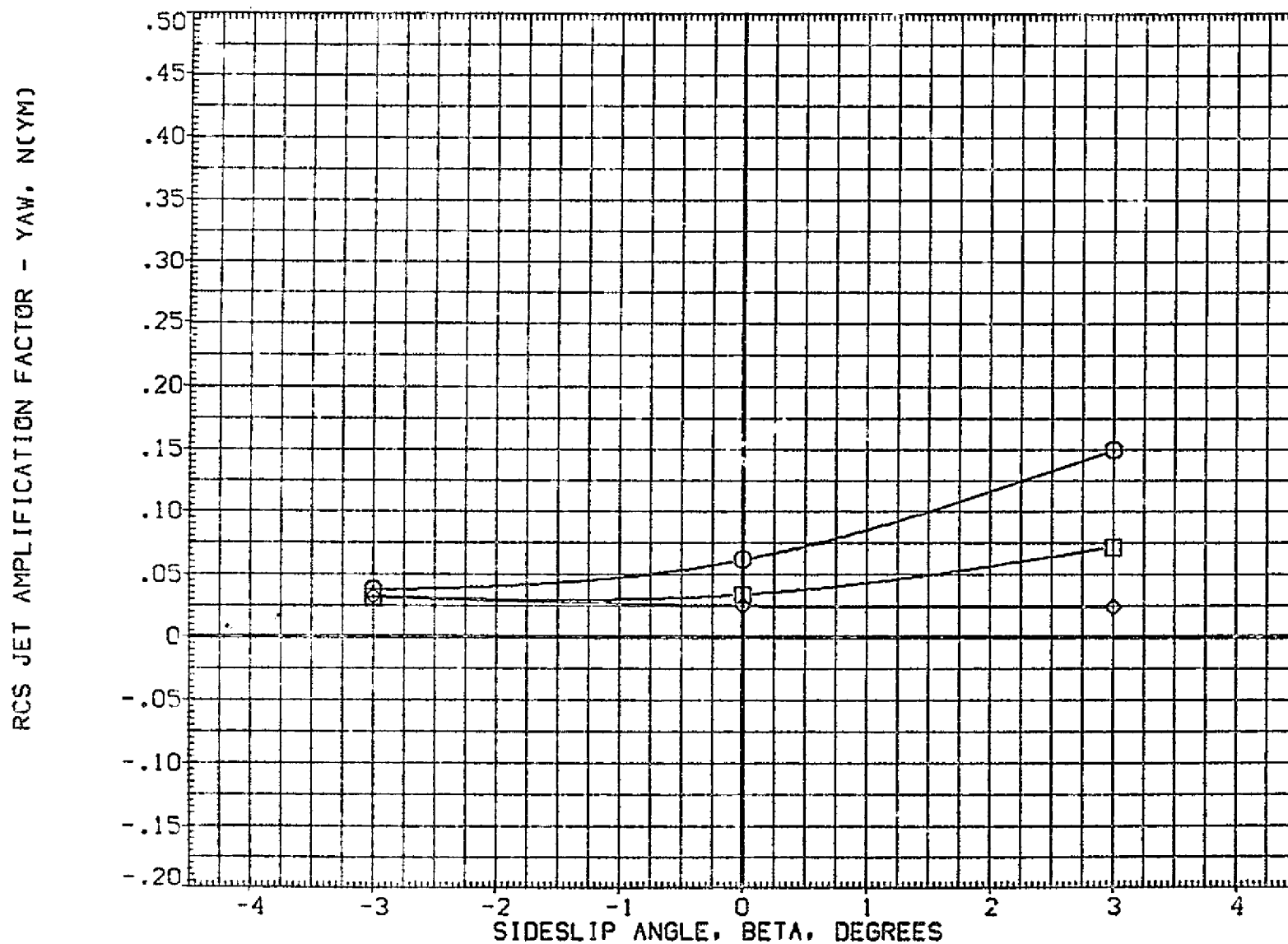


FIGURE 90. AMPLIFICATION FACTOR IN YAW, N79N78 JETS

01N79N78 1 ARC CFHT 118 (MA-22)

(CJA232)

SYMBOL	T/OA-1	PARAMETRIC VALUES			
○	47.500	MACH	10.330	ALPHA	35.000
□	95.000	BDFLAP	.000	T/OA	95.000
◇	190.000	NO.JET	2.000	ELEVON	.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8000	INCHES
BREF	936.6800	INCHES
XHRP	1076.7000	IN. XO
YHRP	.0000	IN. YO
ZHRP	375.0000	IN. ZO
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - YAW, N(YM)

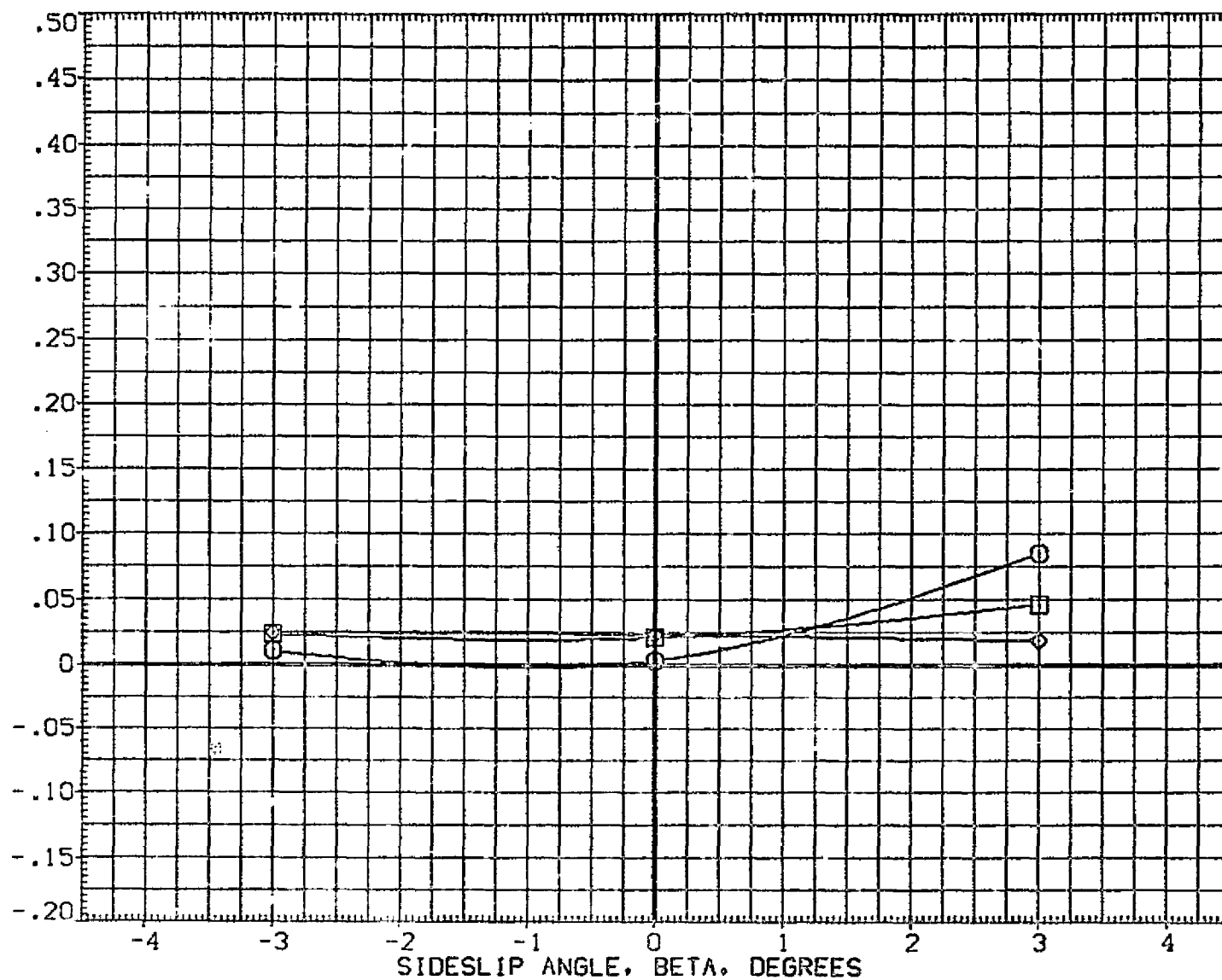


FIGURE 90. AMPLIFICATION FACTOR IN YAW, N79N78 JETS

SYMBOL	VALUE	UNIT	PARAMETRIC VALUES
Q	17.500	MACH	10.000
R	95.000	BOPLA	1.000
S	100.000	NO. JET	2.000
			ALPHA -10.000
			1/4A 95.000
			1/4A 95.000

REFERENCE INFORMATION		
QREF	2690.0000	SG. FT.
LREF	474.8100	INCHES
BREF	910.6800	INCHES
XMRP	1076.7000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - NORMAL FORCE, NCN

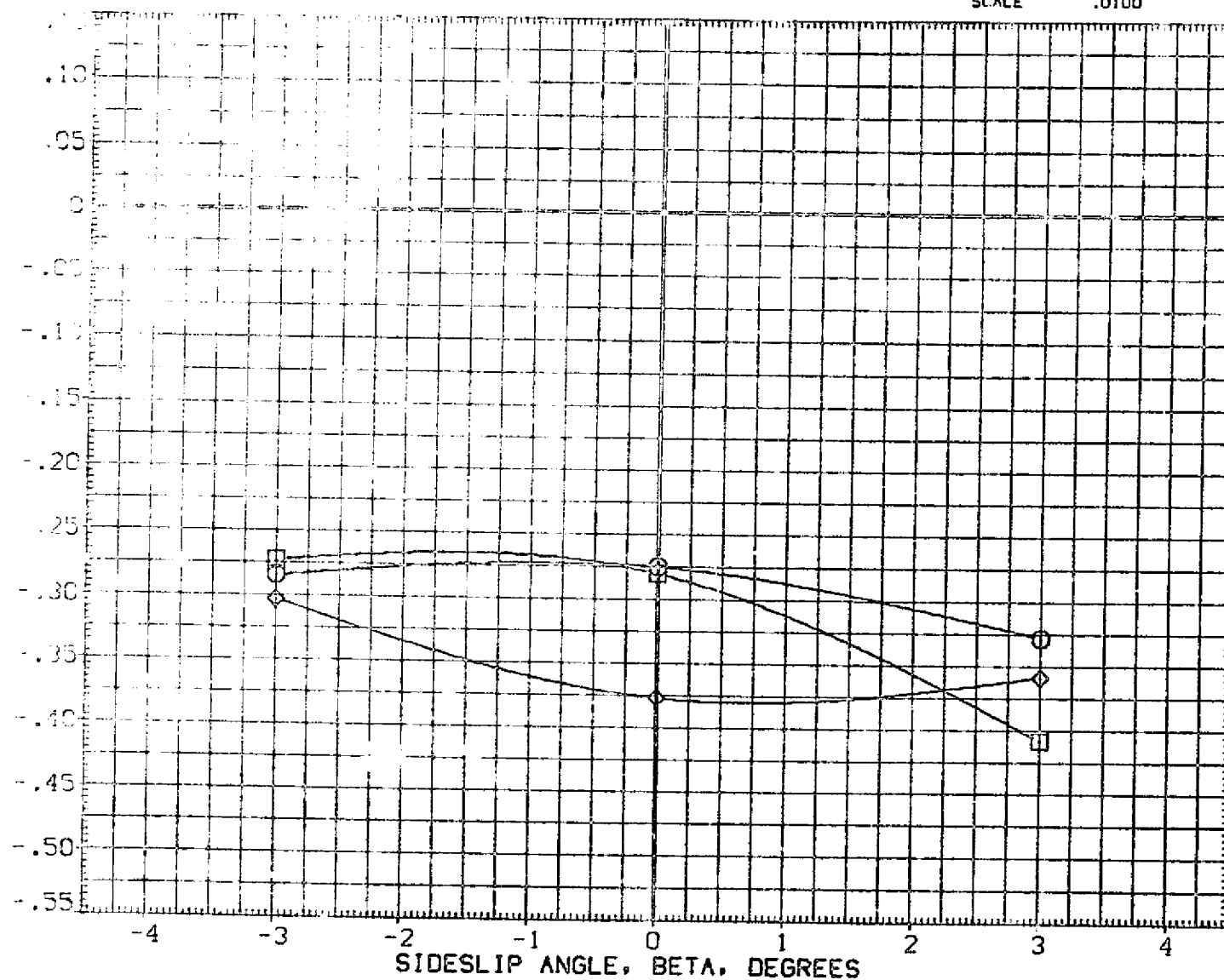


FIGURE 90. AMPLIFICATION FACTOR IN YAW, N79N78 JETS

SYMBOL	T/OA-1	PARAMETRIC VALUES			
○	47.500	MACH	10.330	ALPHA	.000
□	95.000	BDCLAP	.000	T/OA	95.000
◇	190.000	NOJET	2.000	ELEVON	.000

REFERENCE INFORMATION		
SREF	2690.0000	50.FT.
LREF	474.8000	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0100	

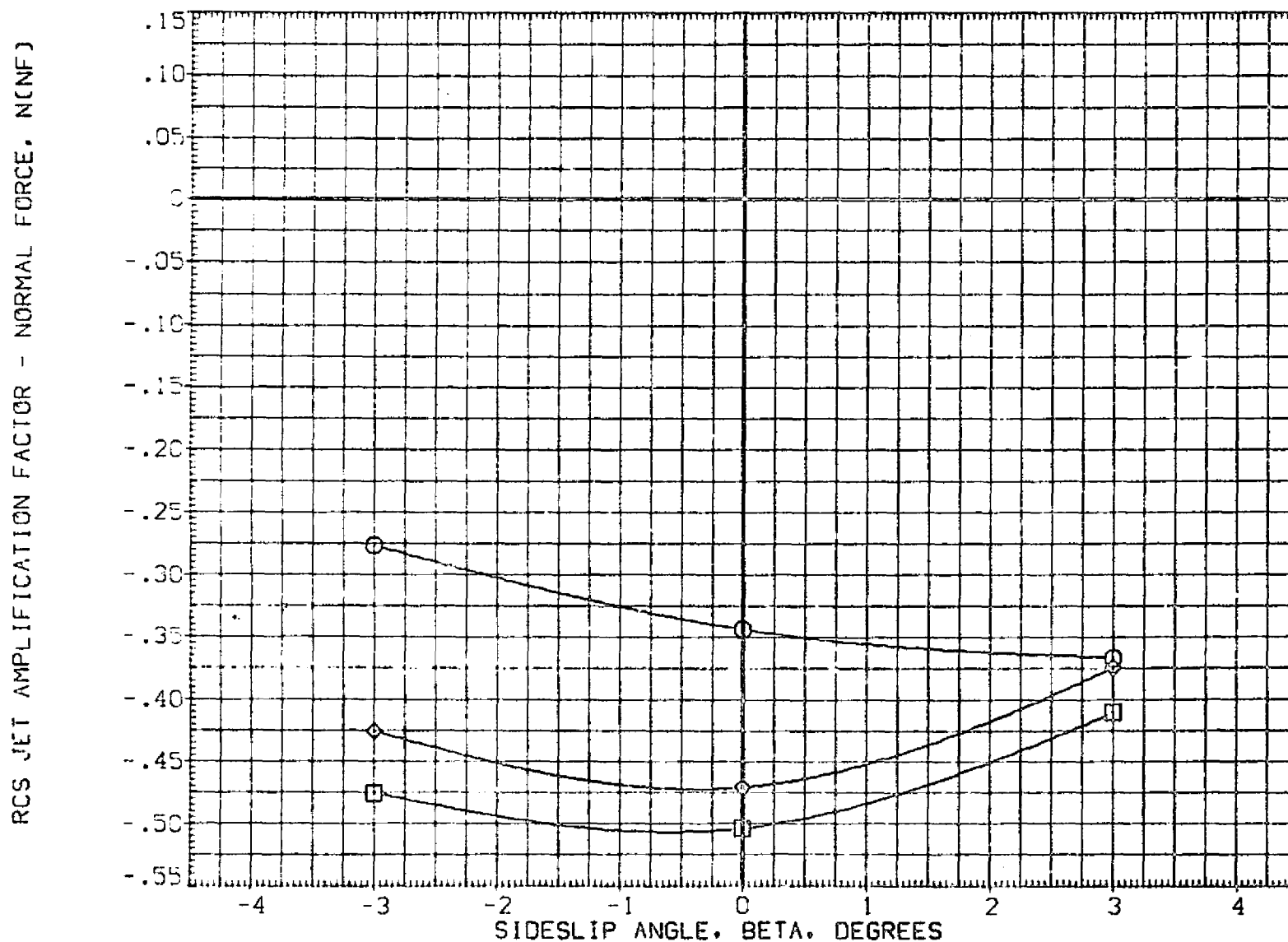


FIGURE 90. AMPLIFICATION FACTOR IN YAW, N79N78 JETS

SOURCE	T/OA	MACH	BOFLAP	NO. JET	PARAMETRIC VALUES	ALPHA	ELEVON
47.000	10.330	10.000					
35.000	.000	10.000					
190.000	2.000	.000					

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.6000	INCHES
BREF	936.6800	INCHES
YMRP	105.7000	IN. YD
ZMRP	.0000	IN. YD
ZMRP	375.0000	IN. YD
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - NORMAL FORCE, N(NF)

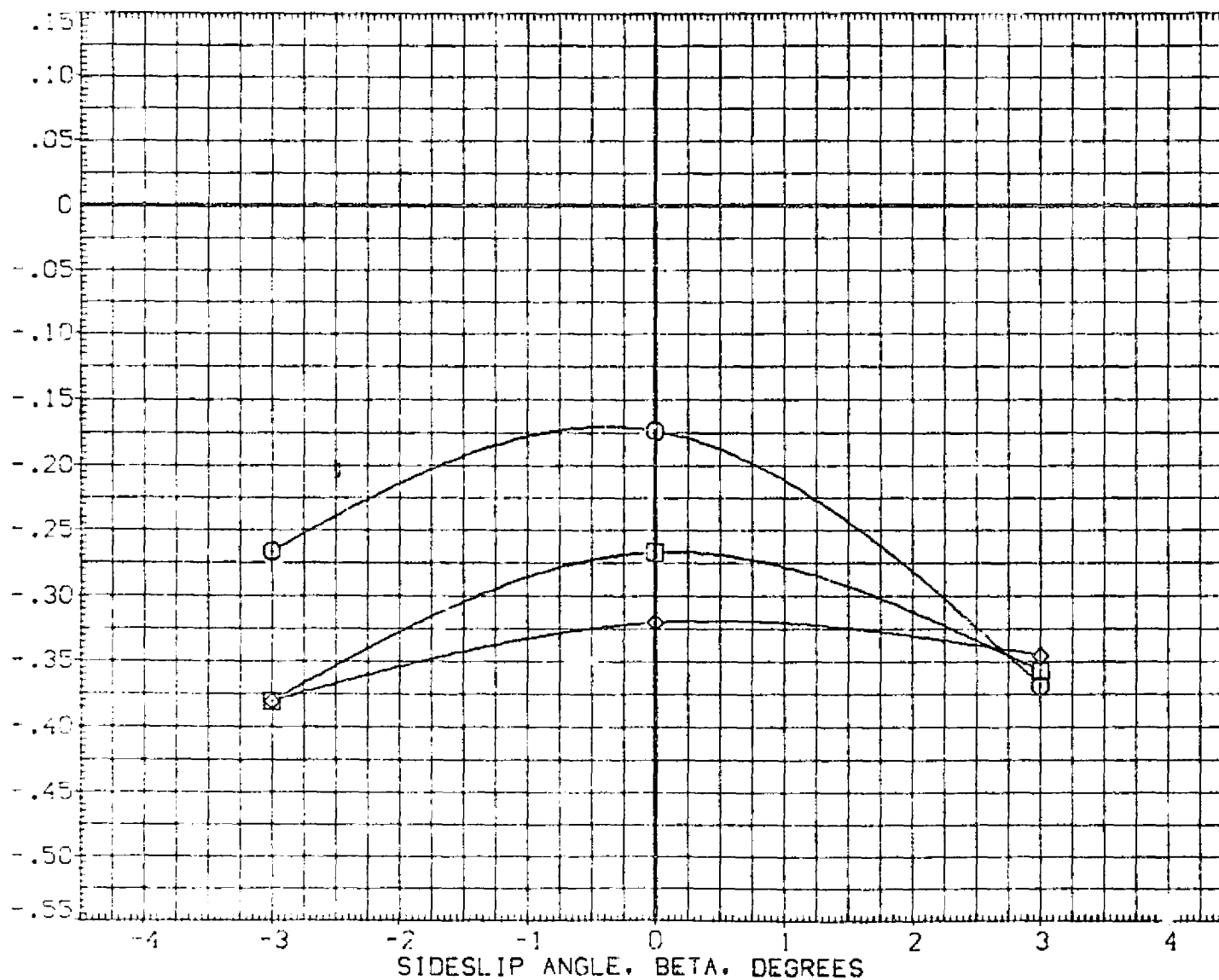


FIGURE 90. AMPLIFICATION FACTOR IN YAW, N79N78 JETS

SYMBOL

T/QA-1

PARAMETRIC VALUES

47.500	MACH	10.330	ALPHA	20.000
95.000	BDFLAP	.000	T/QA	95.000
190.000	NO.JET	2.000	ELEVON	.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8000	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - NORMAL FORCE, N(NF)

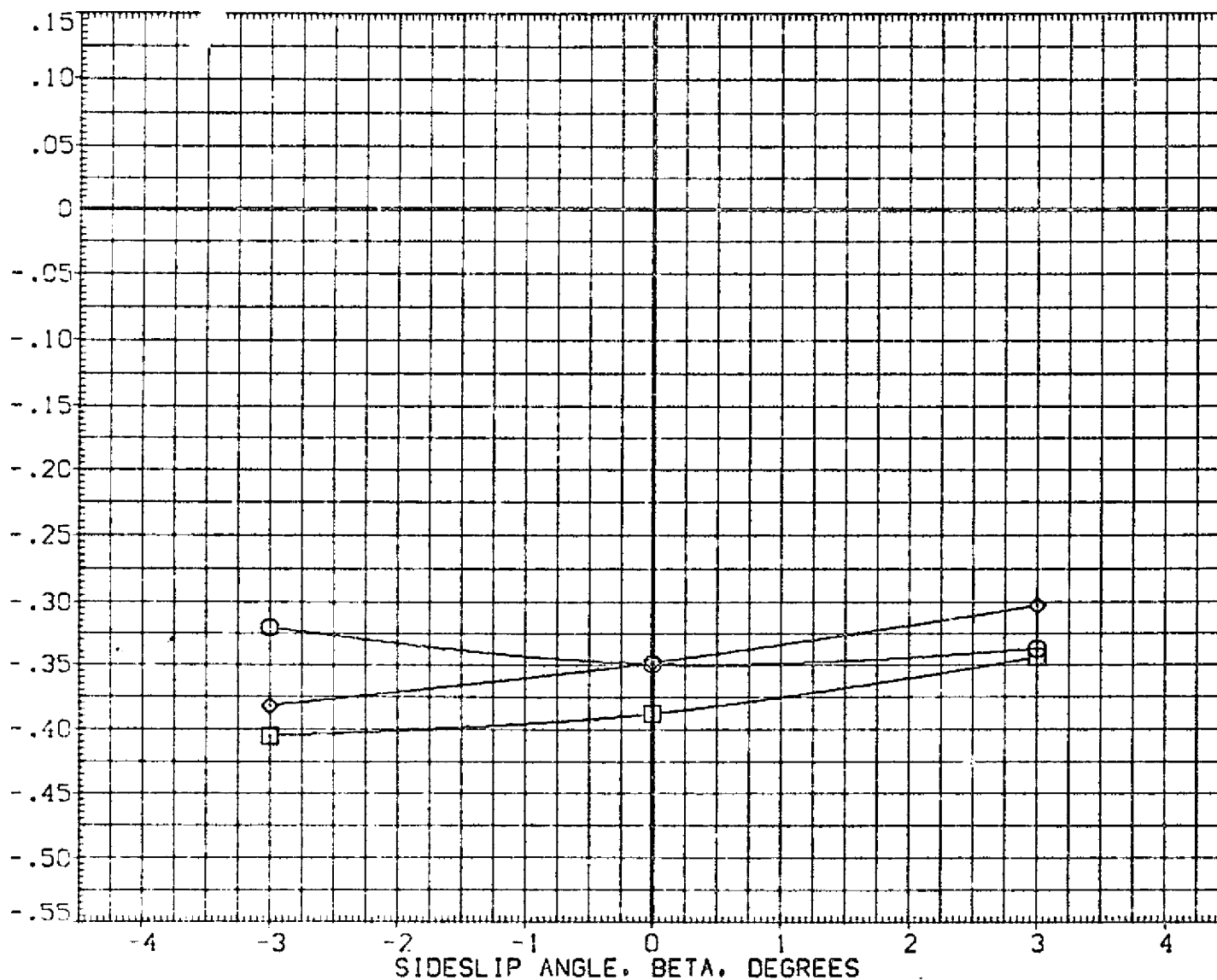


FIGURE 90. AMPLIFICATION FACTOR IN YAW, N79N78 JETS

SYMBOL	1/DA-1	PARAMETRIC VALUES			
○	47.500	MACH	10.330	ALPHA	35.000
□	95.000	BOFLAP	1.000	1/DA	95.000
◇	190.000	NOJET	2.000	DETON	.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ. FT.
LREF	474.8000	INCHES
BREF	936.6800	INCHES
AMRP	1.16.7000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	5.0000	IN. Z0
SCALE	.0100	

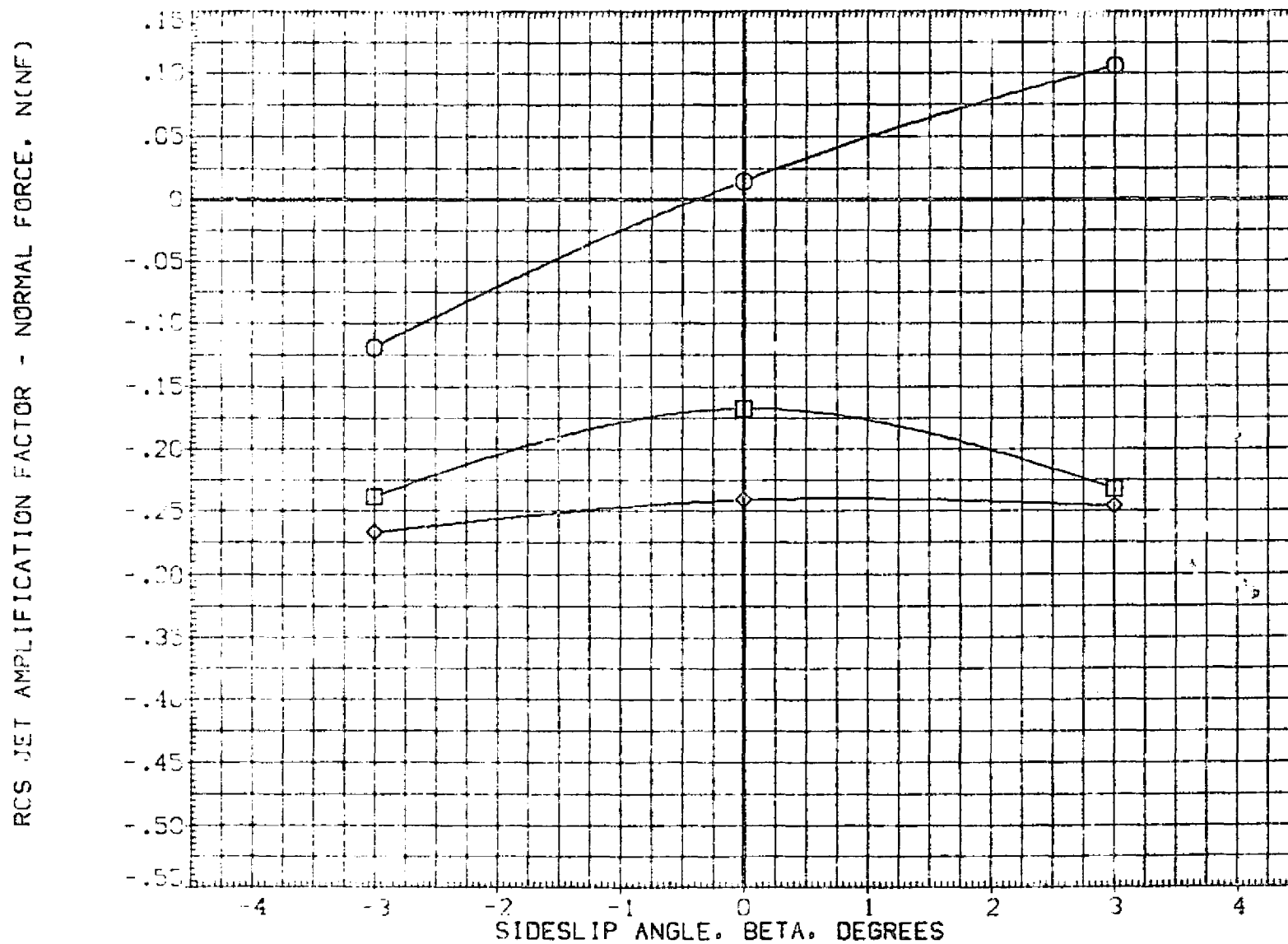


FIGURE 90. AMPLIFICATION FACTOR IN YAW, N79N78 JETS

SYMBOL	T/QA-1	PARAMETRIC VALUES
○	47.500	MACH 10.330 ALPHA -10.000
□	95.000	BDCLAP .000 T/QA 95.000
◇	190.000	NO.JET 2.000 ELEVON .000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8000	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - AXIAL FORCE, N(AF)

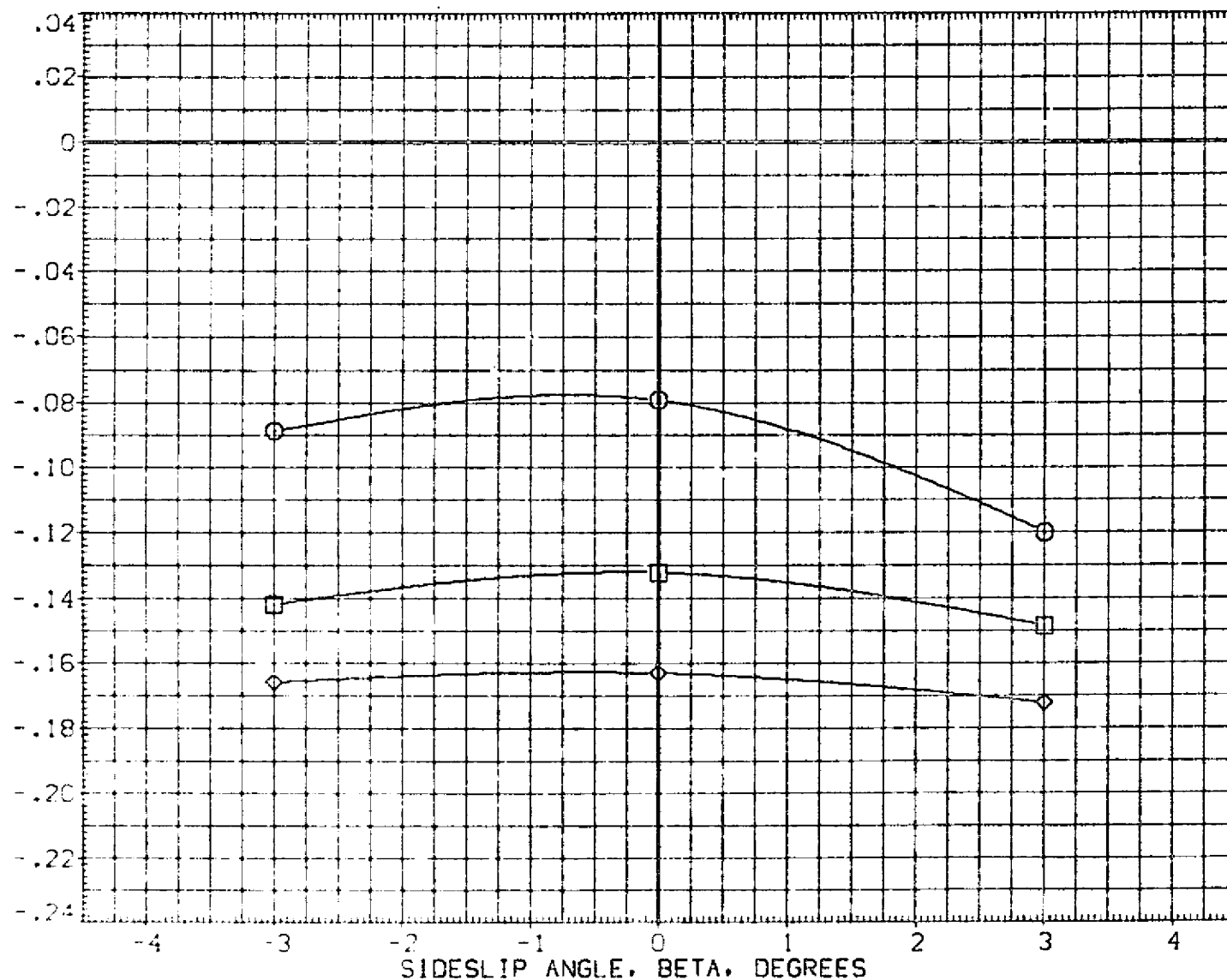


FIGURE 90. AMPLIFICATION FACTOR IN YAW, N79N78 JETS

SYMBOL	T/QA-1	MACH	PARAMETRIC VALUES		
○	47.500		10.330	ALPHA	.000
□	95.000	BDPLAP	.000	T/QA	95.000
◇	190.000	NOJET	2.000	ELEVON	.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8000	INCHES
BREF	935.6800	INCHES
XMRP	1074.7000	IN. XC
YMRP	.0000	IN. YC
ZMRP	37.0000	IN. ZC
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - AXIAL FORCE, N(AF)

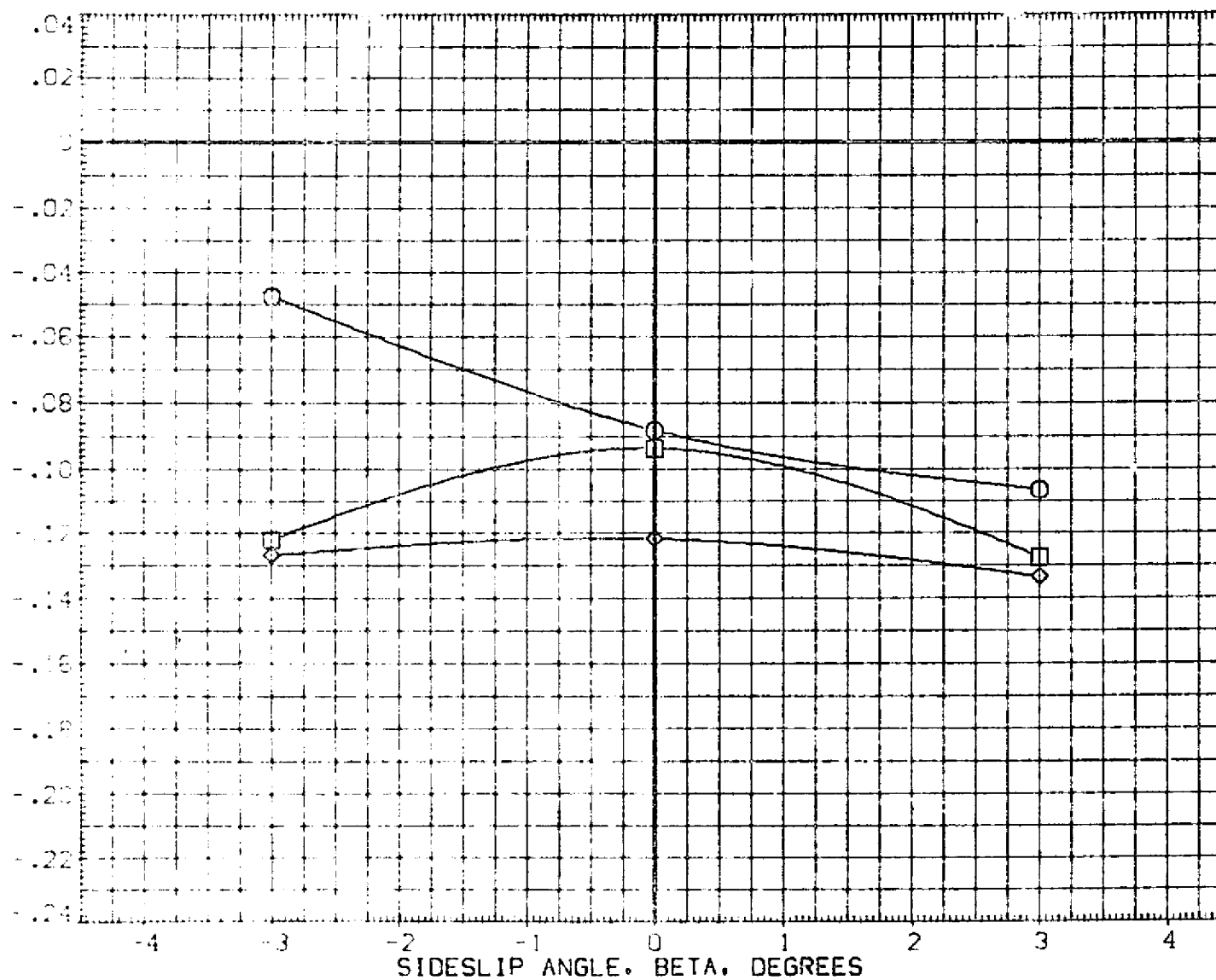


FIGURE 90. AMPLIFICATION FACTOR IN YAW, N79N78 JETS

01N79N78 LARC CFHT 118 (MA-22)

(CJA232)

SYMBOL	T/QA-1	MACH	PARAMETRIC VALUES			
○	47.500		10.330	ALPHA	10.000	
□	95.000	BD FLAP	.000	T/QA	95.000	
◇	190.000	NO JET	2.000	ELEVON	.000	

REFERENCE INFORMATION	
SREF	2690.0000 SQ.FT.
LREF	474.8000 INCHES
BREF	936.6800 INCHES
XMRP	1076.7000 IN. X0
YMRP	.0000 IN. Y0
ZMRP	375.0000 IN. Z0
SCALE	.0100

RCS JET AMPLIFICATION FACTOR - AXIAL FORCE, N(AF)

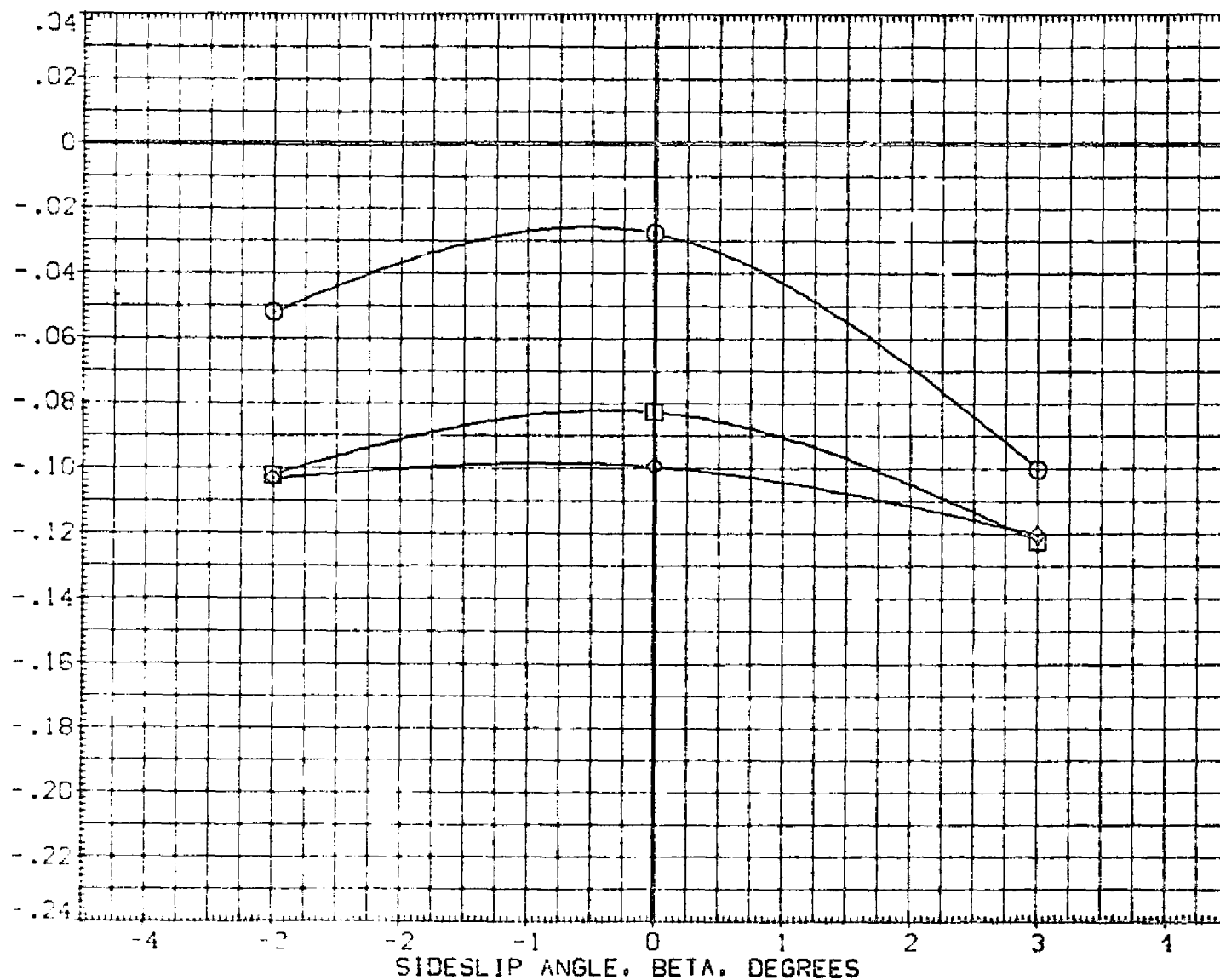


FIGURE 90. AMPLIFICATION FACTOR IN YAW, N79N78 JETS

SYMBOL	T/QA-1	MACH	PARAMETRIC VALUES	ALPHA	20.000
○	47.500	BDCLAP	.000	T/QA	95.000
□	95.000	NOJET	2.000	ELEVON	.000
◇	190.000				

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8000	INCHES
BREF	936.6800	INCHES
XMRP	1075.7000	IN. X3
YMRP	.0000	IN. Y3
ZMRP	375.0000	IN. Z0
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - AXIAL FORCE, NCAF)

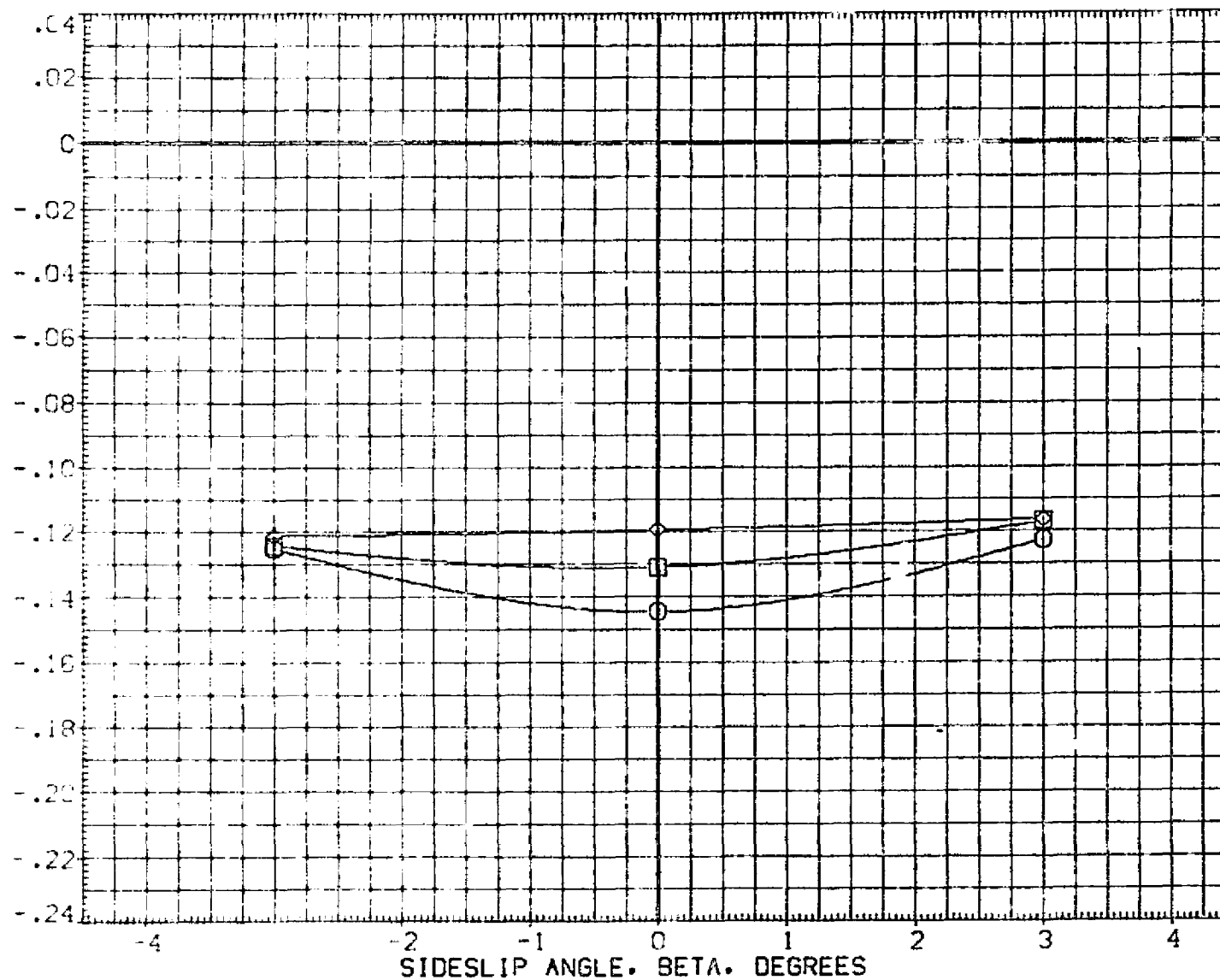


FIGURE 90. AMPLIFICATION FACTOR IN YAW, N79N78 JETS

01N79N78 LARC CFHT 118 (MA 22)

(CJA232)

SYMBOL	T/QA-1	MACH	PARAMETRIC VALUES	ALPHA	35.000
○	47.500	BD FLAP	.000	T/QA	95.000
□	95.000	NO JET	2.000	ELEVON	.000
◇	190.000				

REFERENCE INFORMATION	
SREF	2690.0000 SQ. FT.
LREF	474.8000 INCHES
BREF	936.6800 INCHES
XMRP	1076.7000 IN. X0
YMRP	.0000 IN. Y0
ZMRP	375.0000 IN. Z0
SCALE	.0100

RCS JET AMPLIFICATION FACTOR - AXIAL FORCE, N(AF)

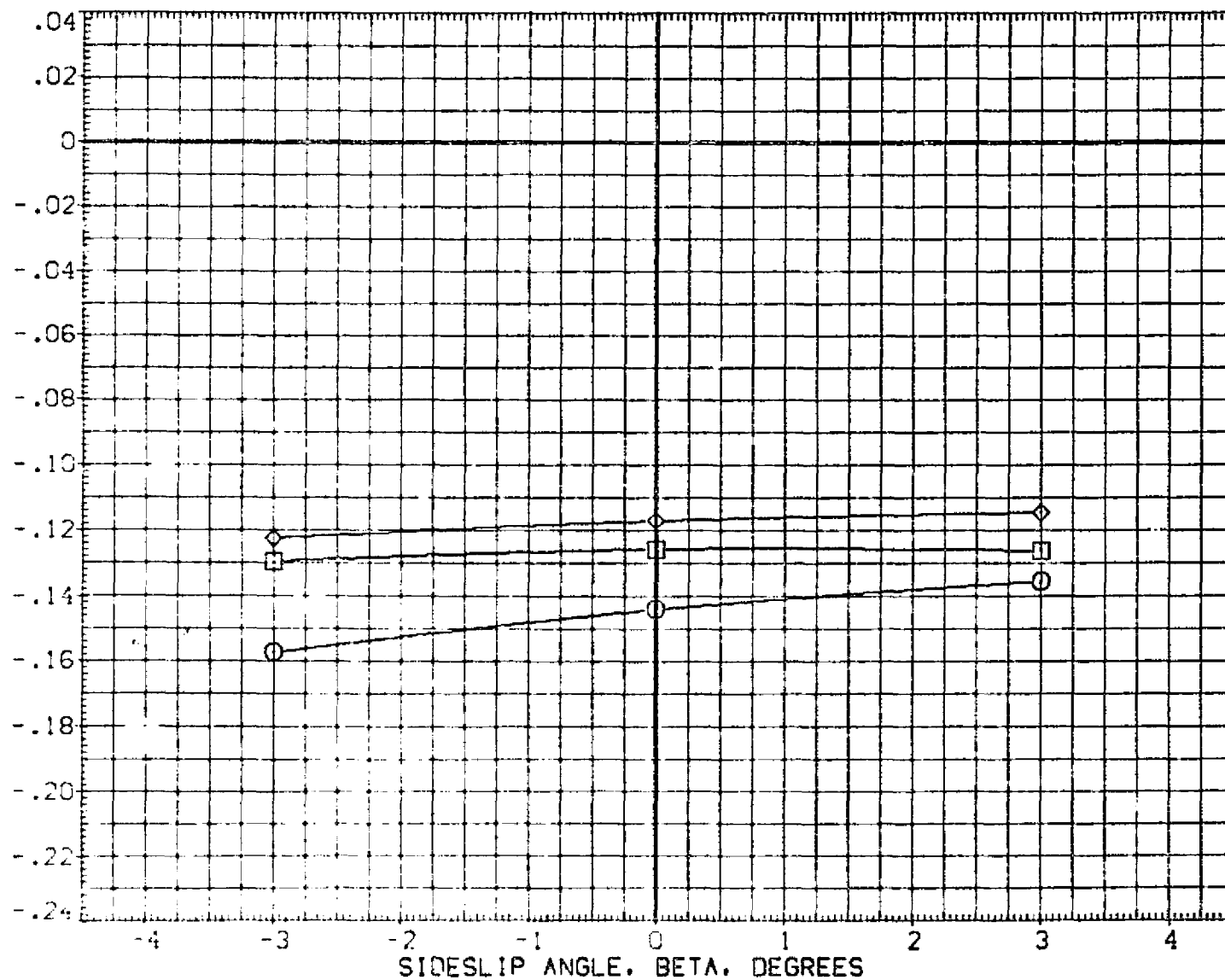


FIGURE 90. AMPLIFICATION FACTOR IN YAW, N79N78 JETS

SYMBOL	T/QA-1	PARAMETRIC VALUES			
○	47.500	MACH	10.330	ALPHA	-10.000
□	95.000	REFLAP	1.000	T/QA	95.000
◇	190.000	NO.JET	2.000	ELEVON	.000

REFERENCE INFORMATION		
SREF	2690.0000	50.FT.
LREF	474.8000	INCHES
BREF	936.6000	INCHES
XMRP	10.0000	IN. X0
YMRP	0.0000	IN. Y0
ZMRP	3.0000	IN. Z0
SCALE	.0100	

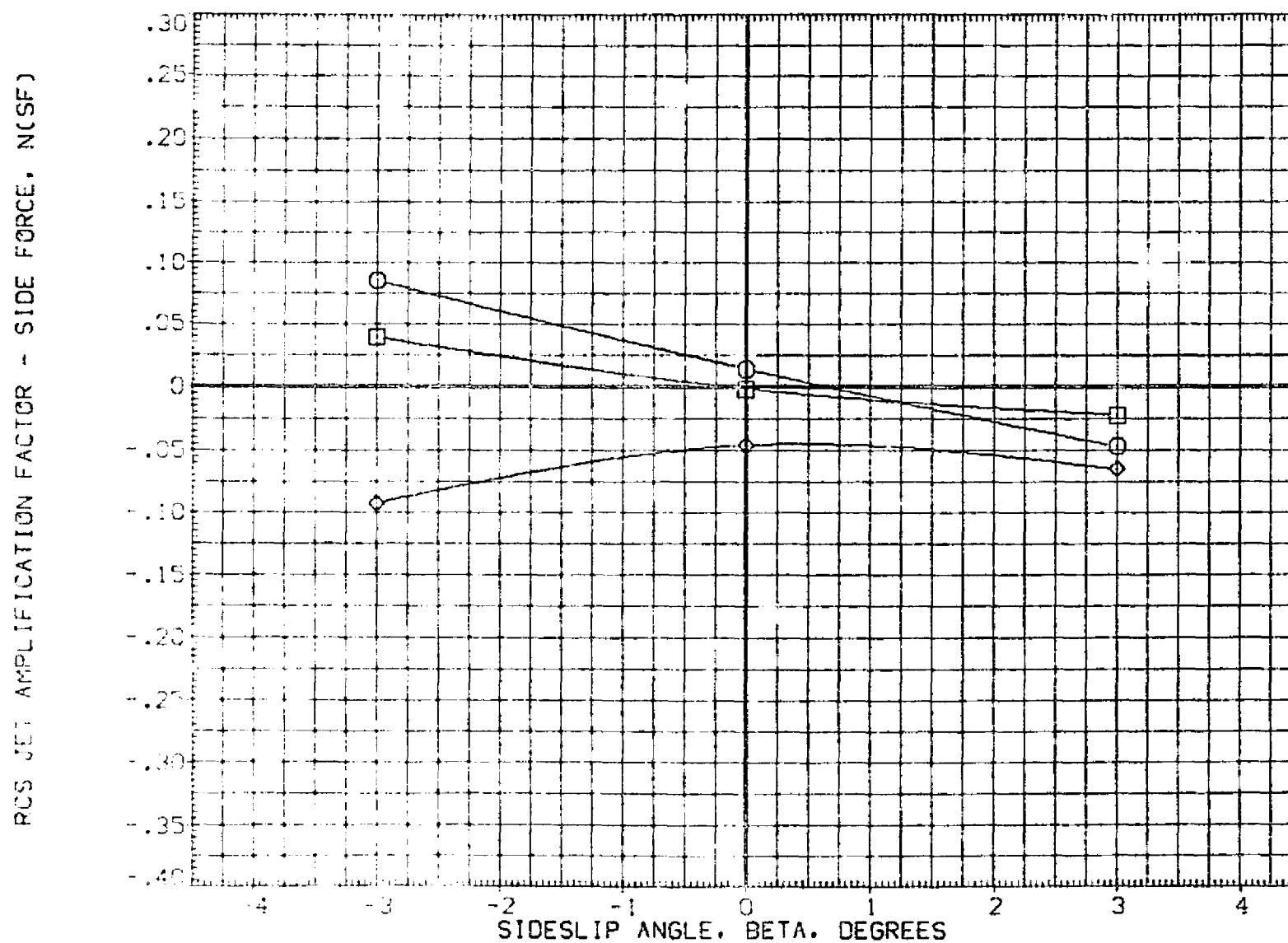


FIGURE 90. AMPLIFICATION FACTOR IN YAW, N79N78 JETS

SYMBOL	T/OA-1	MACH	PARAMETRIC VALUES	ALPHA	T/OA	ELEVON
○	47.500	10.330	.000	95.000	.000	
□	95.000	.000	95.000	.000		
◇	190.000	2.000	.000			

REFERENCE INFORMATION		
SREF	2690.0000	50.FT.
LREF	474.8000	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - SIDE FORCE, N(SF)

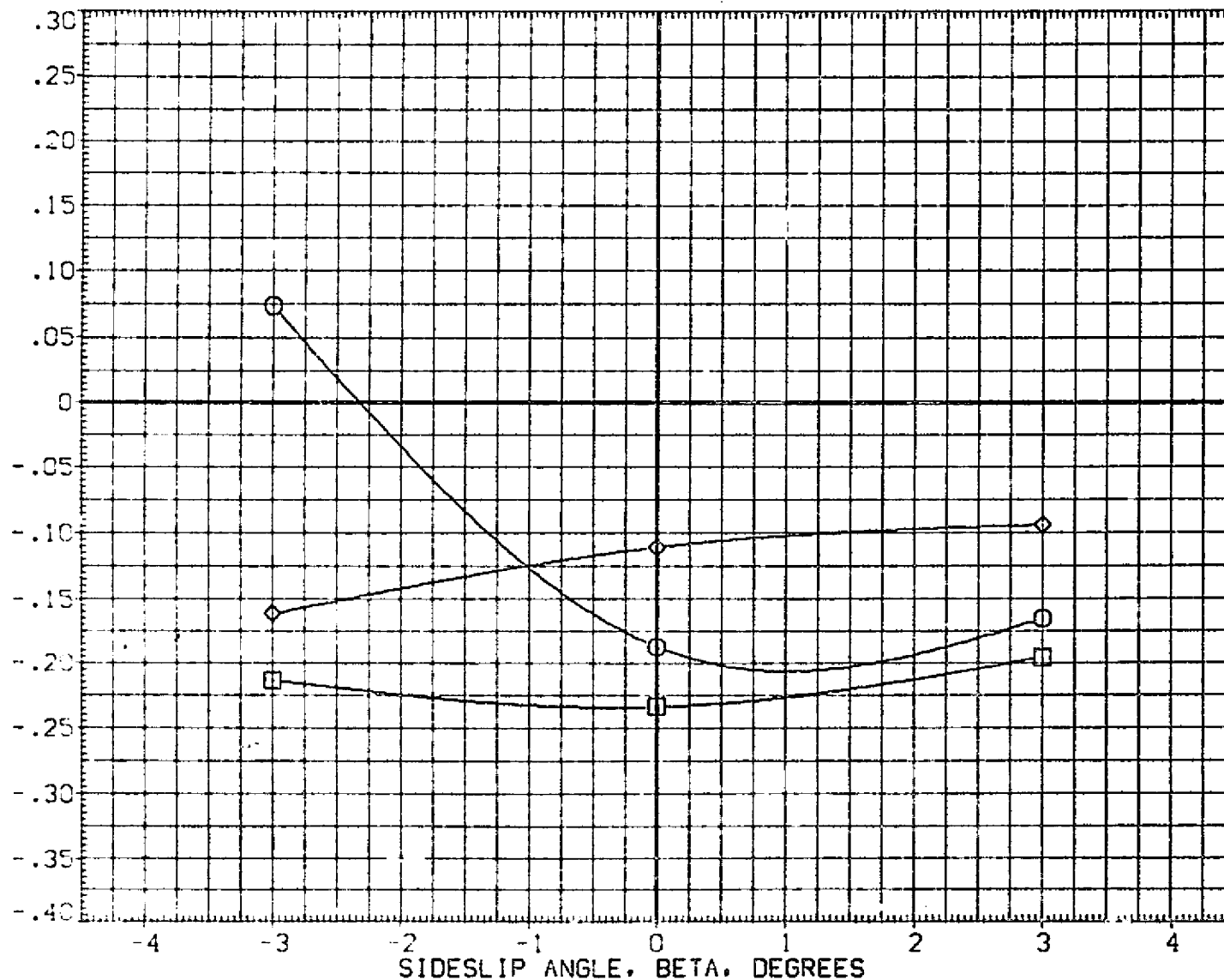


FIGURE 90. AMPLIFICATION FACTOR IN YAW, N79N78 JETS

SYMBOL	T/QA-1	PARAMETRIC VALUES
○	47.500	MACH 10.330 ALPHA 10.000
□	95.000	BDPLAP .000 T/QA 95.000
◇	190.000	NOJET 2.000 ELEVON .000

REFERENCE INFORMATION	
SREF	2690.0000 SQ.FT.
LREF	474.8000 INCHES
BREF	936.6800 INCHES
XMRP	1076.7000 IN. XC
YMRP	.0000 IN. YO
ZMRP	375.0000 IN. ZO
SCALE	.0100

RCS JET AMPLIFICATION FACTOR - SIDE FORCE, N(SF)

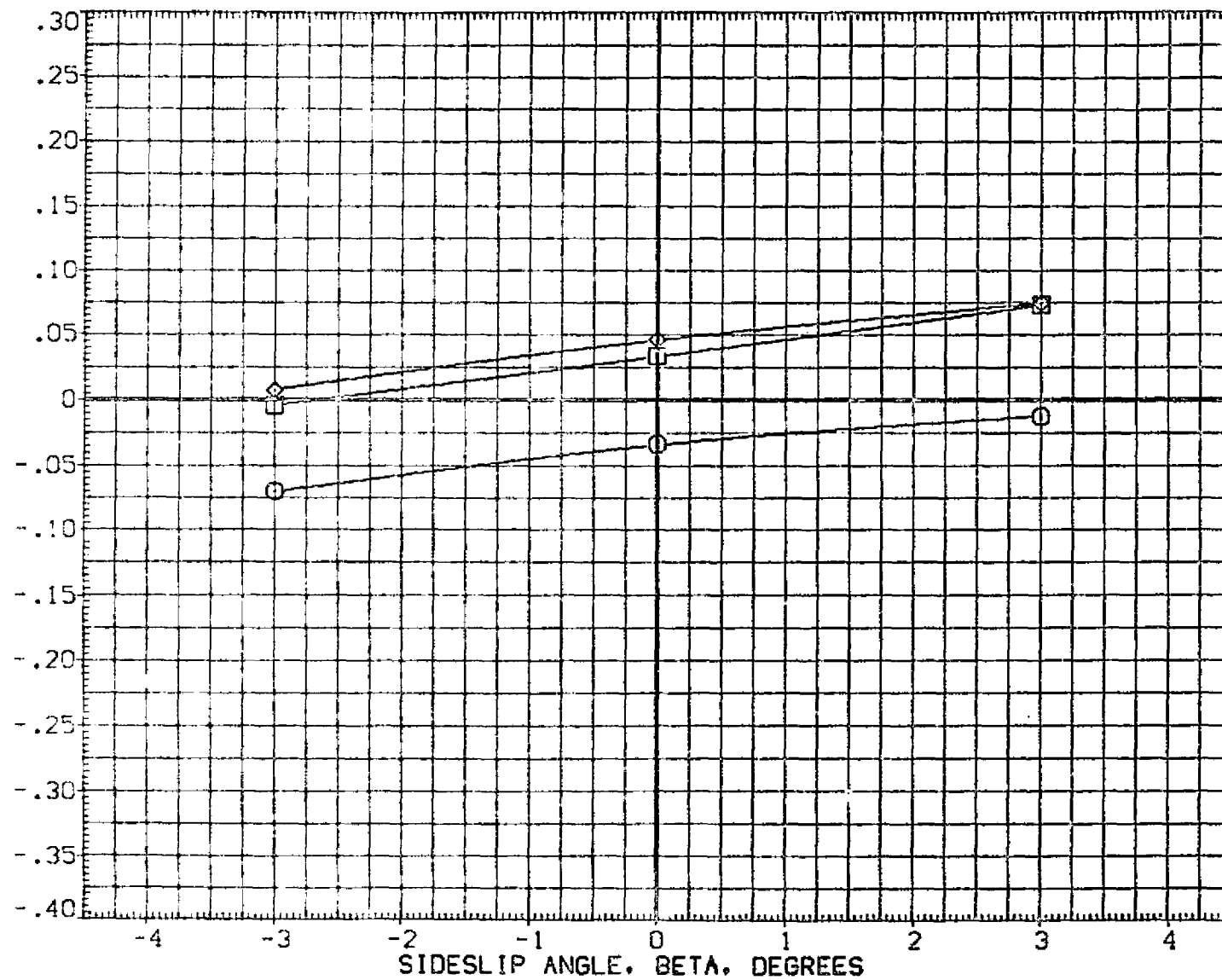


FIGURE 90. AMPLIFICATION FACTOR IN YAW, N79N78 JETS

SYMBOL	T/QA-1	PARAMETRIC VALUES
○	47.500	MACH 10.330 ALPHA 20.000
□	95.000	BDFLAP .000 T/QA 95.000
◇	190.000	NO JET 2.000 ELEVON .000

REFERENCE INFORMATION		
SREF	2690.0000	50.FT.
LREF	474.8000	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - SIDE FORCE, N(SF)

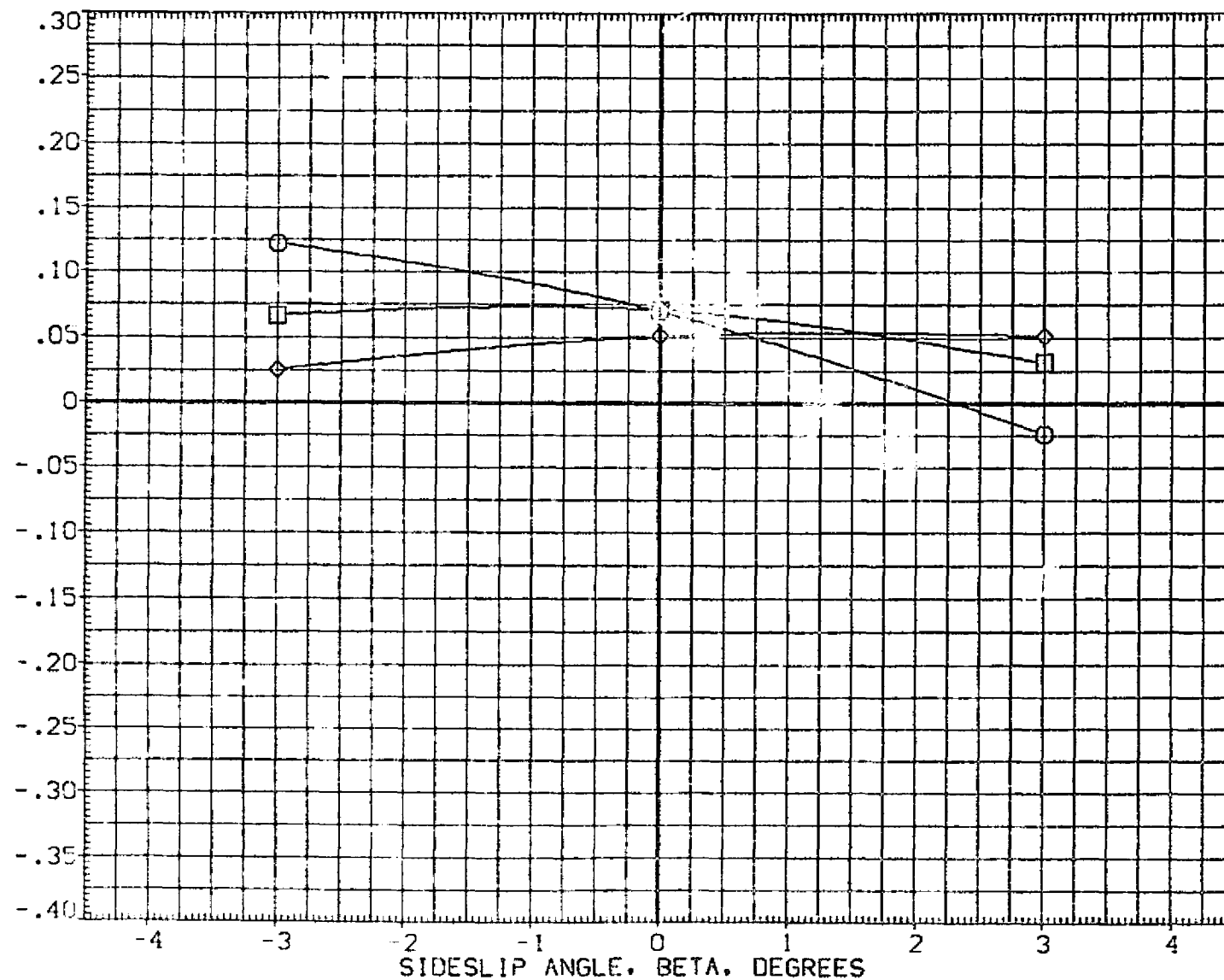


FIGURE 90. AMPLIFICATION FACTOR IN YAW, N79N78 JETS

SYMBOL



T/QA-1

47.500

MACH

95.000

BDFLAP

190.000

NO.JET

PARAMETRIC VALUES

10.330

ALPHA

35.000

T/QA

95.000

ELEVON

.000

REFERENCE INFORMATION

SREF 2690.0000

50.FT.

LREF 474.8000

INCHES

BREF 936.6800

INCHES

XMRP 1076.7000

IN. X0

YMRP .0000

IN. Y0

ZMRP 375.0000

IN. Z0

SCALE .0100

RCS JET AMPLIFICATION FACTOR - SIDE FORCE, N(SF)

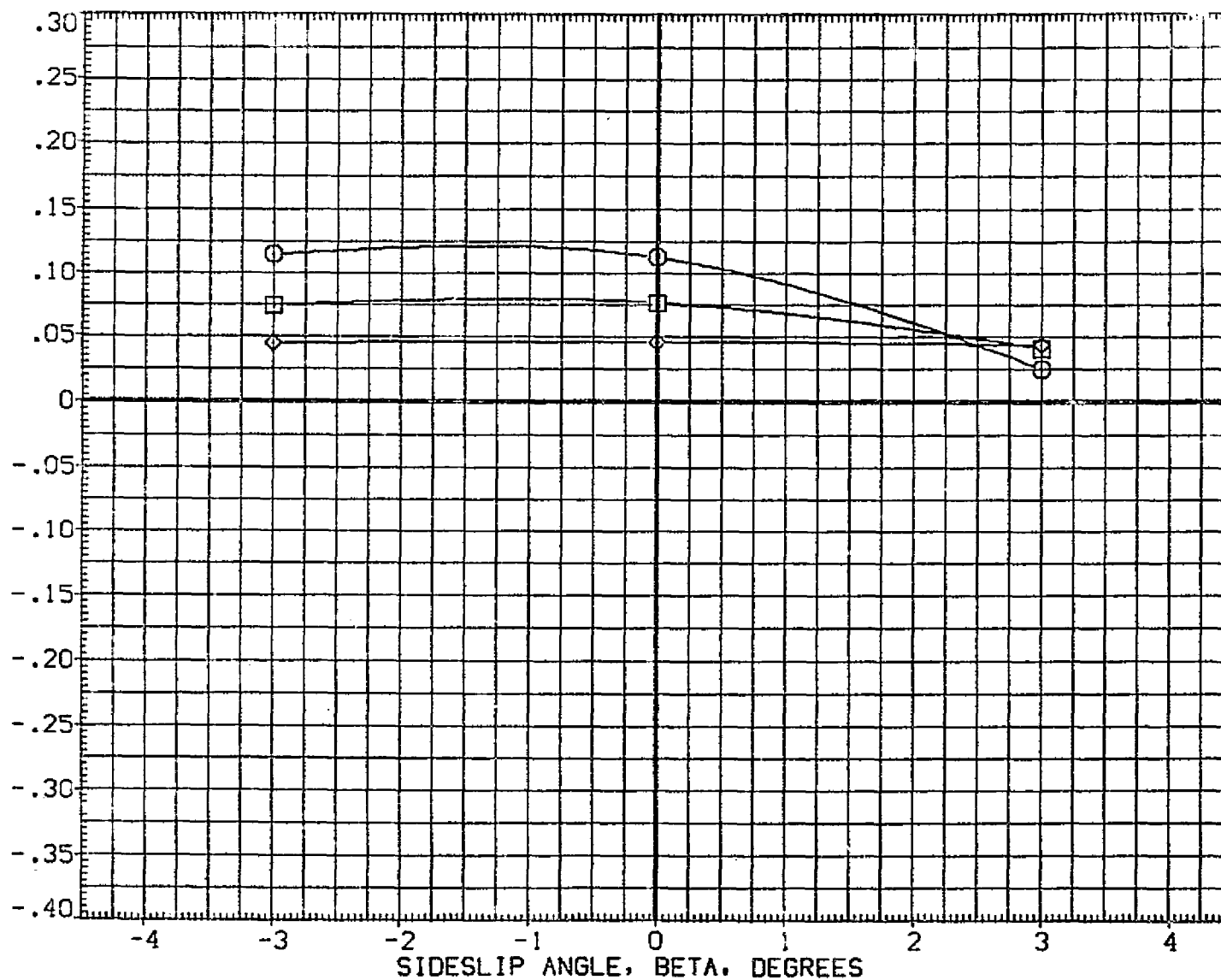


FIGURE 90. AMPLIFICATION FACTOR IN YAW, N79N78 JETS

SYMBOL	T/OA-1	PARAMETRIC VALUES
○	47.500	MACH 10.330 ALPHA -10.000
□	95.000	BDFLAP .000 T/OA 95.000
◇	127.700	NO.JET 2.000 ELEVON .000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8000	INCHES
BREF	936.6600	INCHES
XMRP	1076.7000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - PITCH, NCPM)

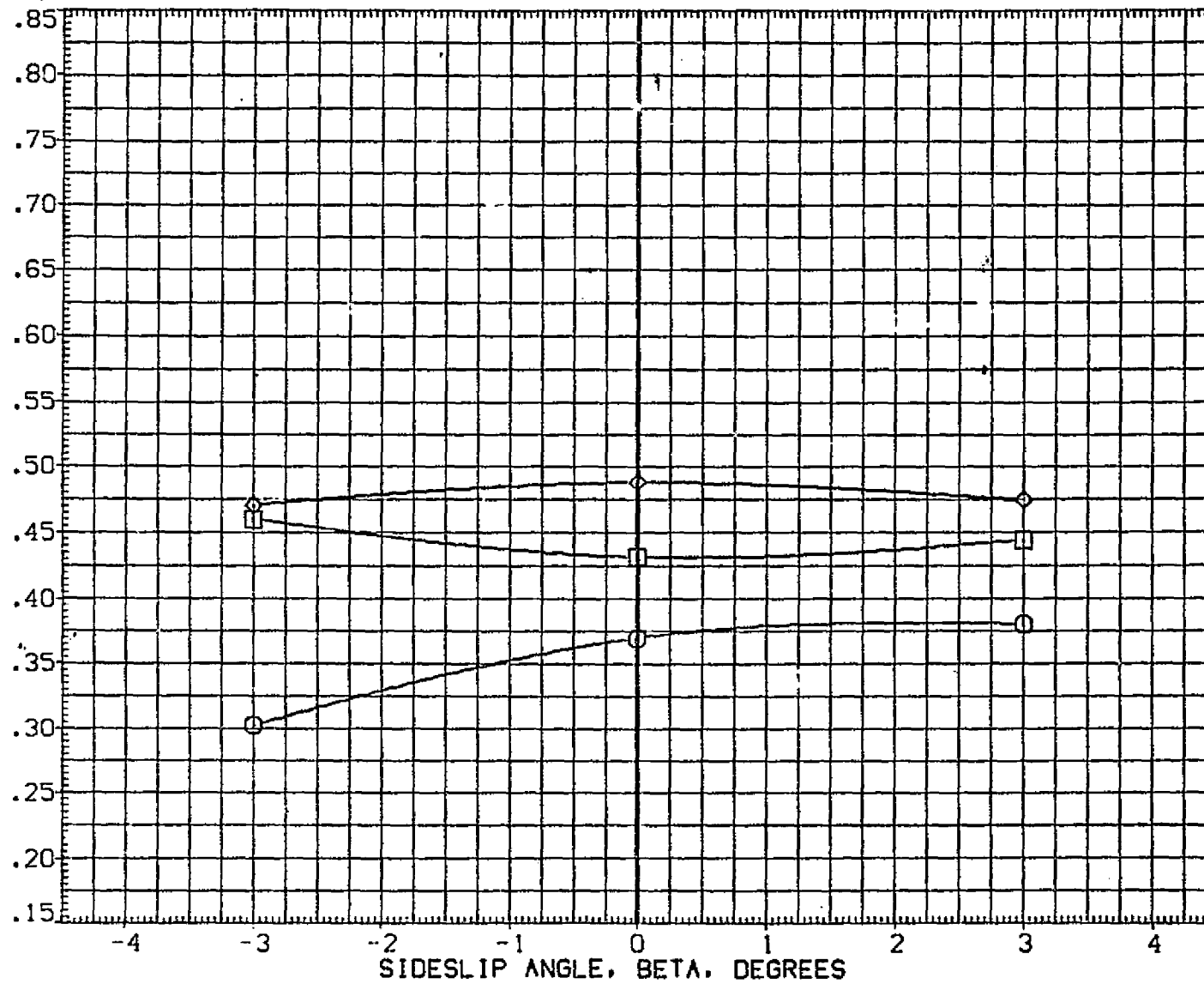


FIGURE 91. AMPLIFICATION FACTOR IN YAW, N50N85 JETS

SYMBOL	T/OA-1	PARAMETRIC VALUES			
○	47.500	MACH	10.330	ALPHA	.000
□	95.000	BDFLAP	.000	T/OA	95.000
◇	127.700	NOJET	2.000	ELEVON	.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8000	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - PITCH, N(PM)

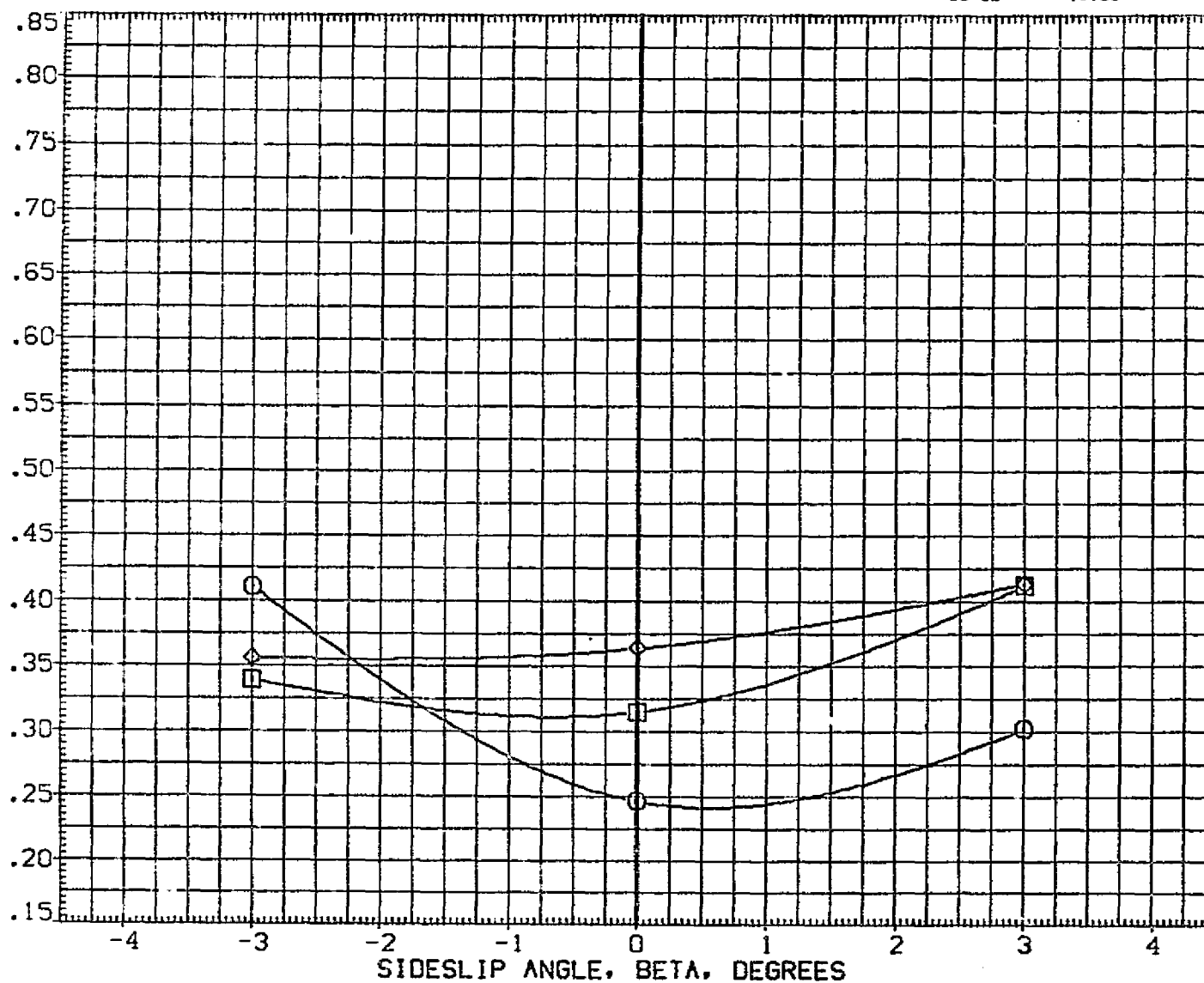


FIGURE 91. AMPLIFICATION FACTOR IN YAW, N50N85 JETS

SYMBOL	T/QA-1	PARAMETRIC VALUES
○	47.500	MACH 10.330 ALPHA 10.000
□	95.000	BDFLAP .000 T/QA 95.000
◇	127.700	NO.JET 2.000 ELEVON .000

REFERENCE INFORMATION		
SREF	2690.0000	50.FT.
LREF	474.8000	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - PITCH, N(PM)

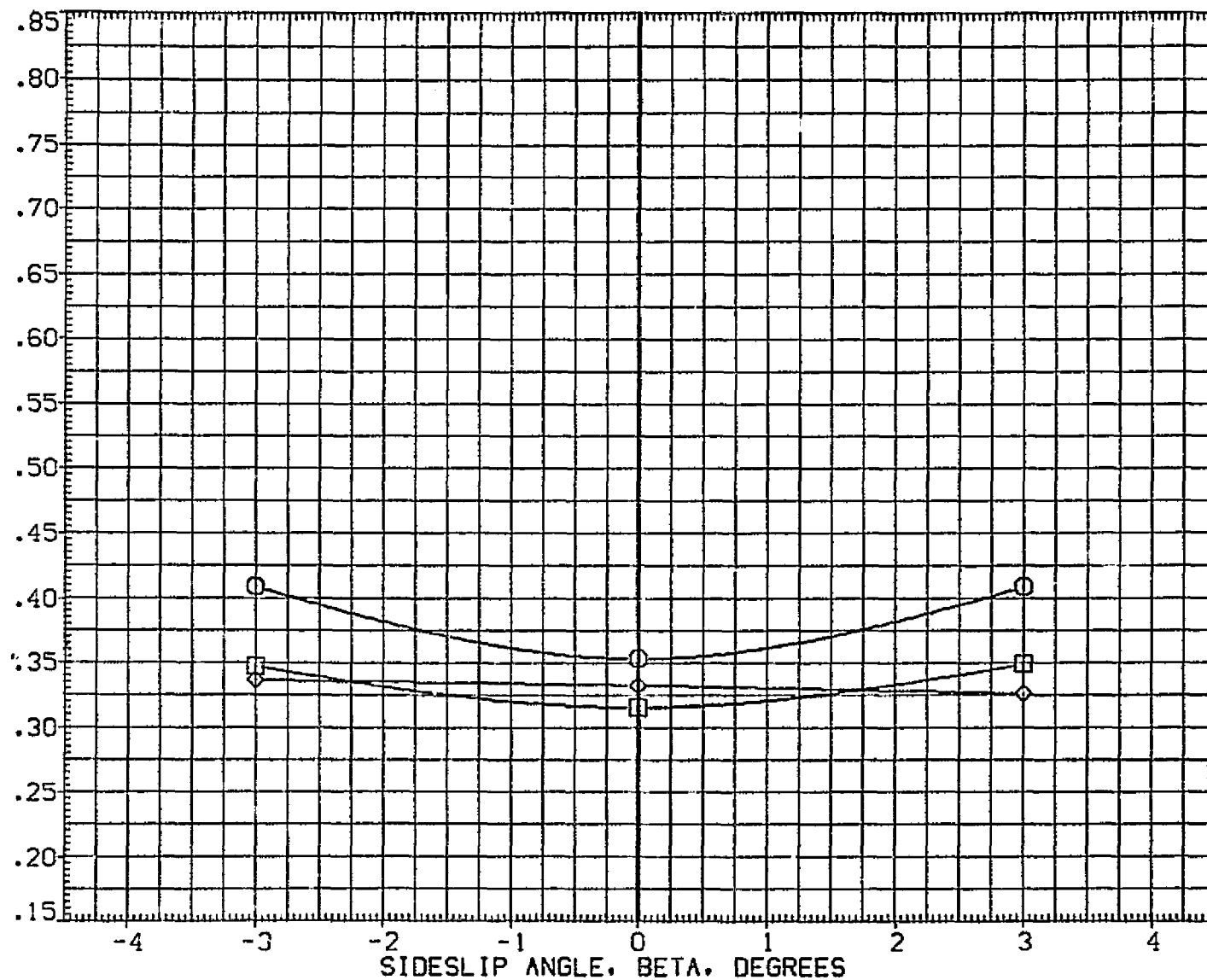


FIGURE 91. AMPLIFICATION FACTOR IN YAW, N50N85 JETS

SYMBOL	T/QA-1	PARAMETRIC VALUES			
○	47.500	MACH	10.330	ALPHA	20.000
□	95.000	BDFLAP	.000	T/QA	95.000
◇	127.700	NOJET	2.000	ELEVON	.000

REFERENCE INFORMATION		
SREF	2690.0000	50.FT.
LREF	474.8000	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - PITCH, NCPM)

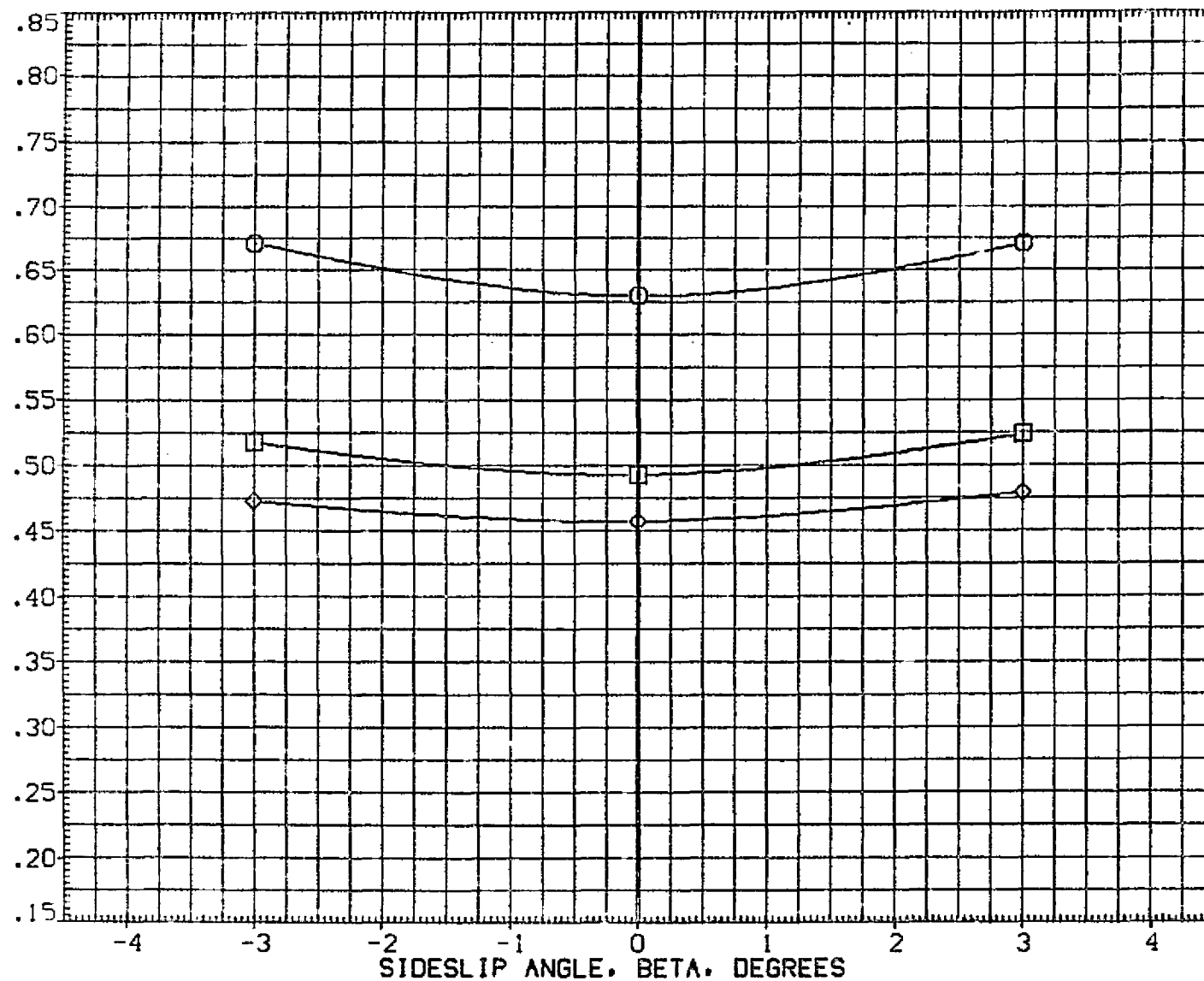


FIGURE 91. AMPLIFICATION FACTOR IN YAW, N50N85 JETS

01N85N50 LARC CFHT 118 (MA-22)

(CJA106)

SYMBOL	T/OA-1	PARAMETRIC VALUES			
○	47.500	MACH	10.330	ALPHA	35.000
□	95.000	BDFLAP	.000	T/QA	95.000
◇	127.700	NO.JET	2.000	ELEVON	.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8000	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - PITCH. N(CPM)

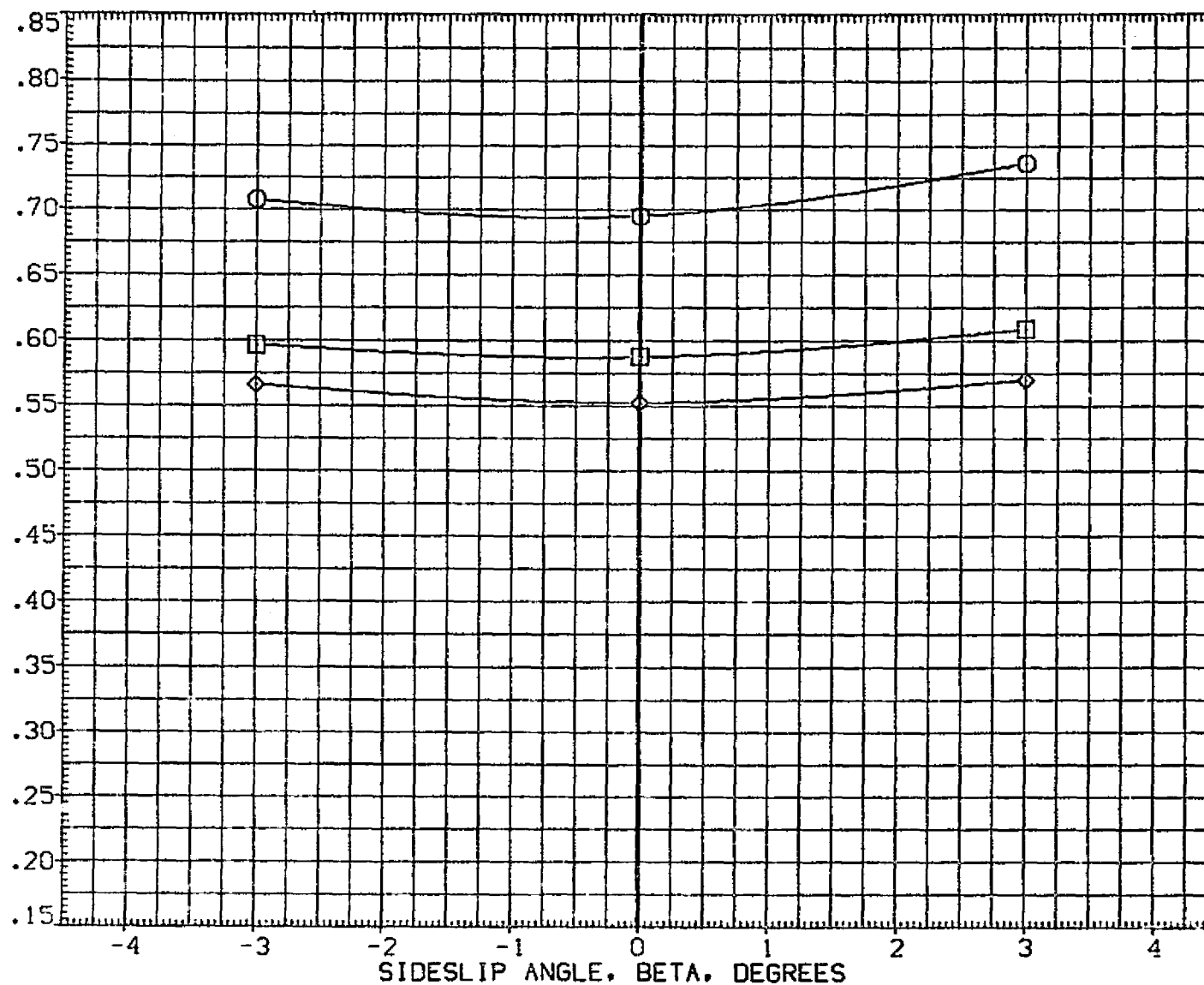


FIGURE 91. AMPLIFICATION FACTOR IN YAW, N50N85 JETS

SYMBOL	T/QA-1	PARAMETRIC VALUES			
○	47.500	MACH	10.330	ALPHA	-10.000
□	95.000	BDFLAP	.000	T/QA	95.000
◇	127.700	NO.JET	2.000	ELEVON	.000

REFERENCE INFORMATION		
SREF	2690.0000	SO.FT.
LREF	474.8000	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - ROLL, N(RM)

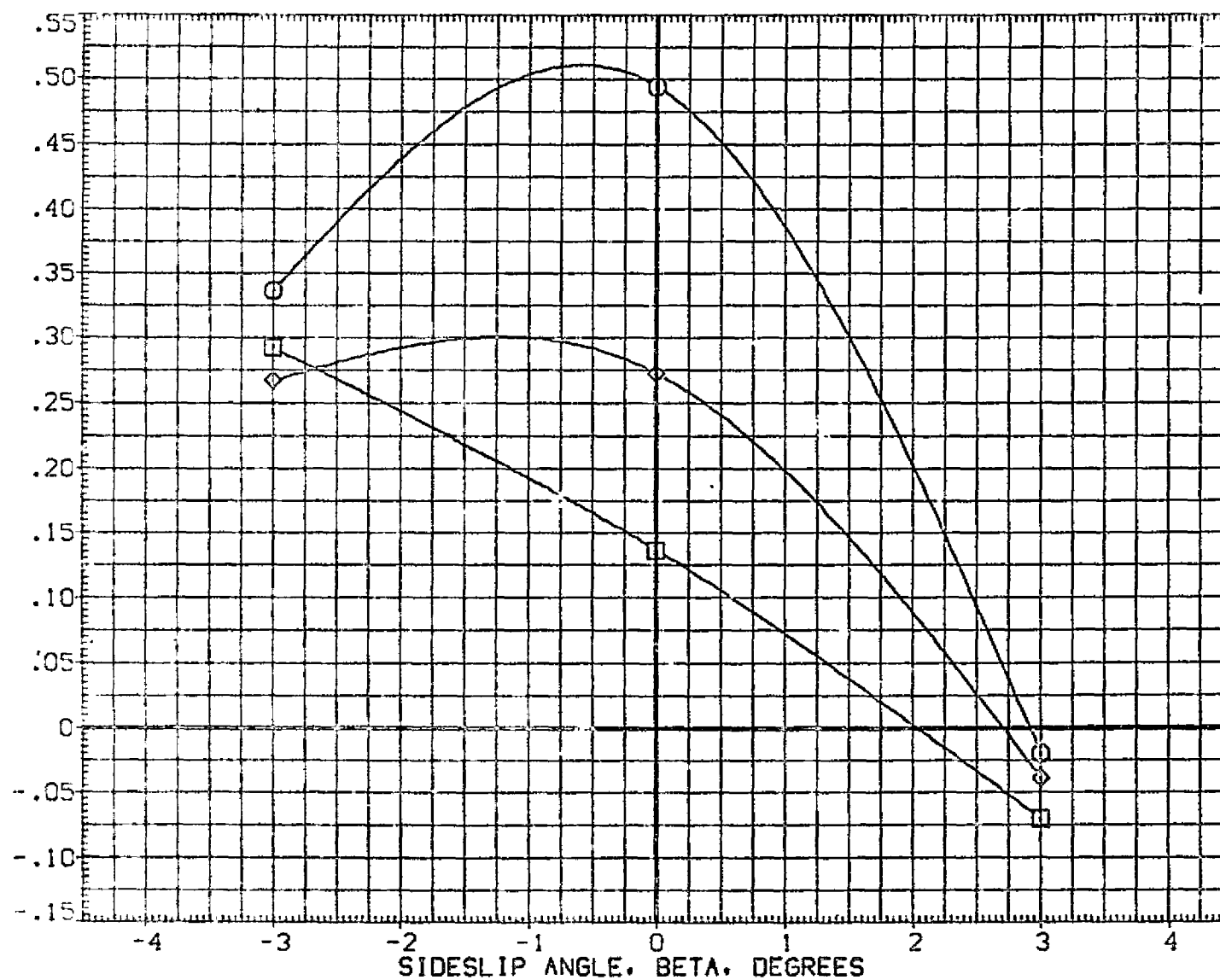


FIGURE 91. AMPLIFICATION FACTOR IN YAW, N50N85 JETS

01N85N50 LARC CFHT 118 (MA-22)

(CJA106)

SYMBOL	T/OA-1	PARAMETRIC VALUES
○	47.500	MACH 10.330 ALPHA .000
□	95.000	BOFLAP .000 T/OA 95.000
◇	127.700	NO.JET 2.000 ELEVON .000

REFERENCE INFORMATION		
SREF	2590.0000	50.FT.
LREF	474.8000	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - ROLL, N(RM)

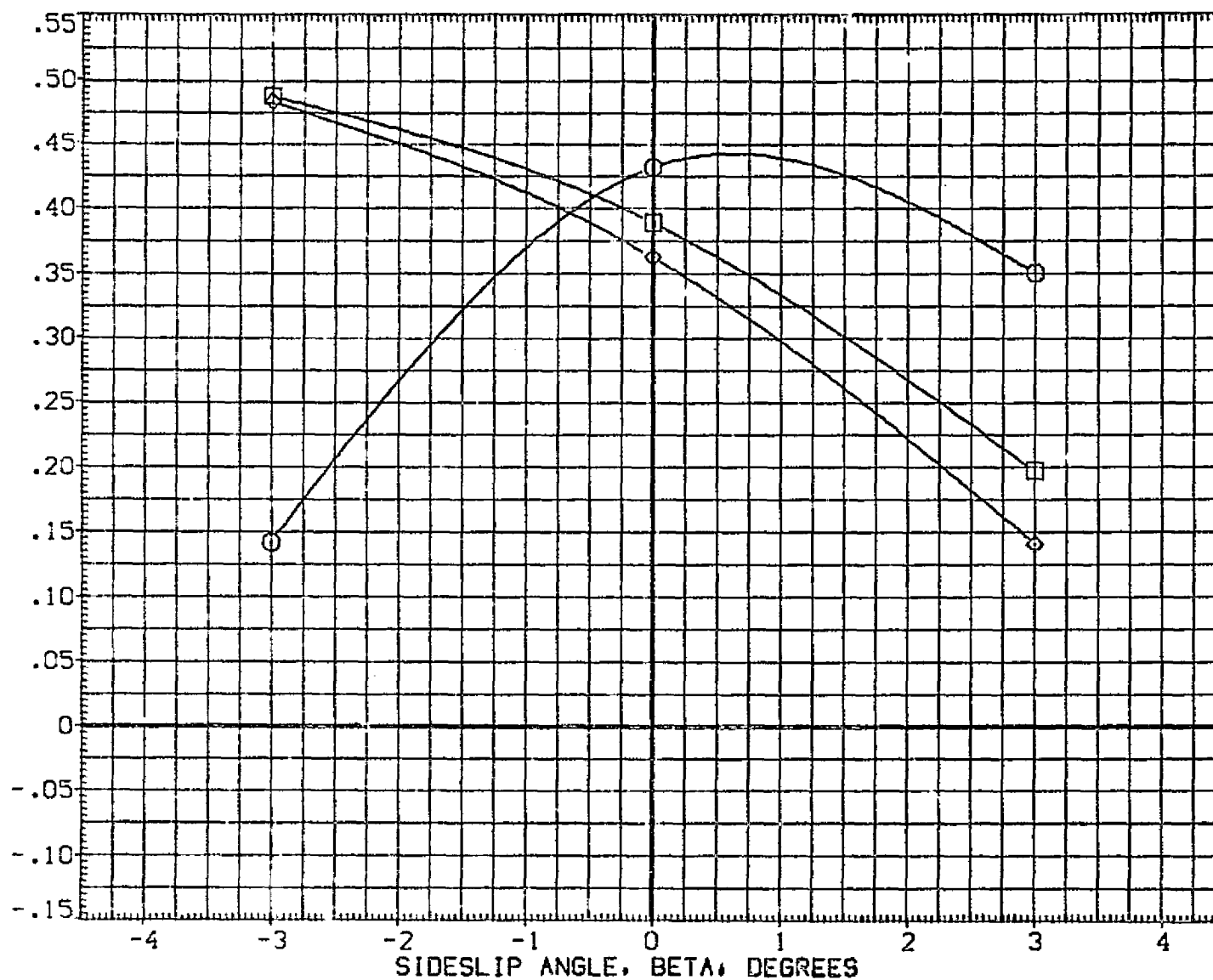


FIGURE 91. AMPLIFICATION FACTOR IN YAW, N50N85 JETS

SYMBOL	T/OA-1	PARAMETRIC VALUES			
○	47.500	MACH	10.330	ALPHA	10.000
□	95.000	BOFLAP	.000	T/OA	95.000
◇	127.700	NO.JET	2.000	ELEVON	.000

REFERENCE INFORMATION		
SREF	2690.0000	59. FT.
LREF	478.8000	INC. 25
BREF	936.6800	INCHES
XMRP	1076.7000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - ROLL, N(RM)

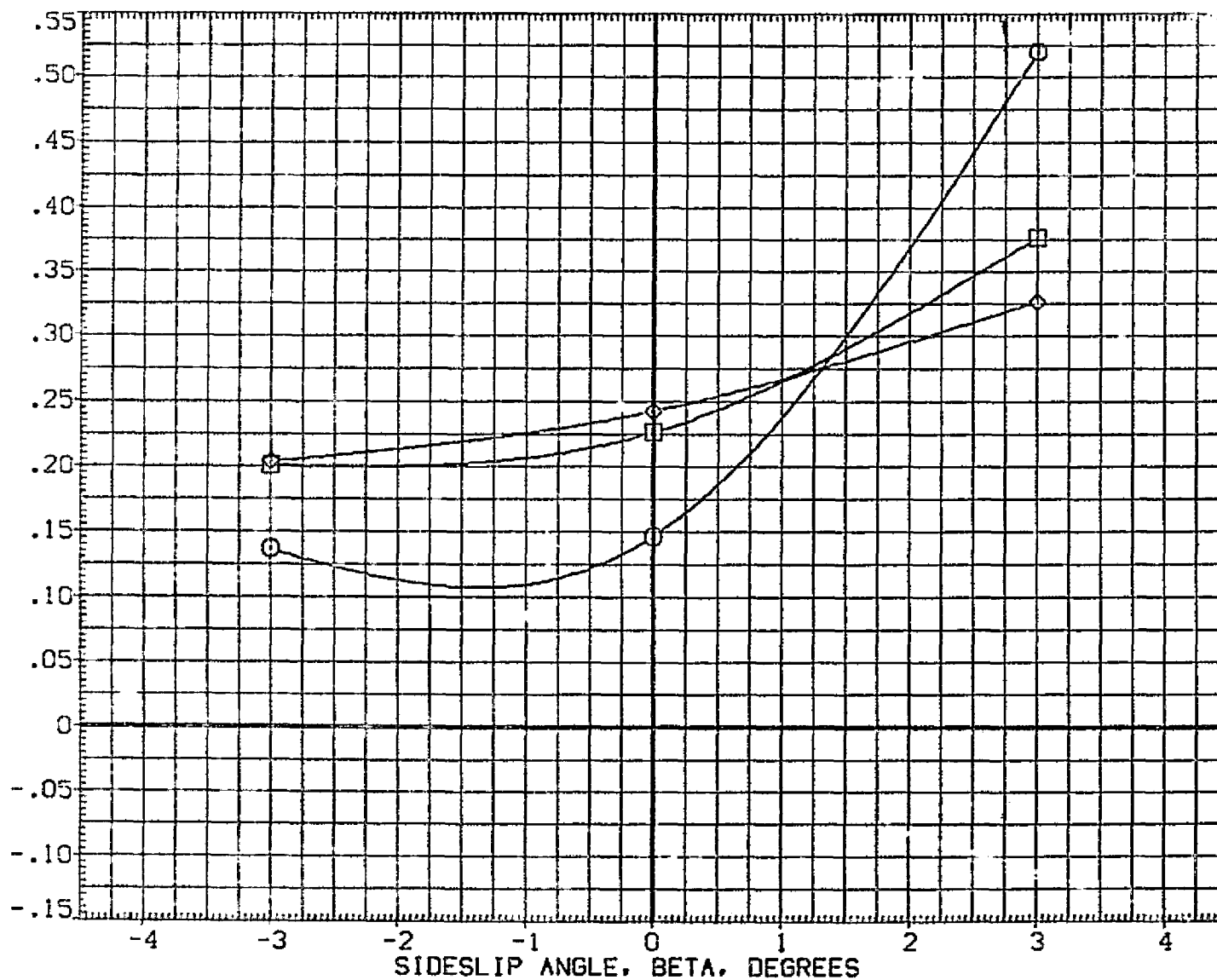


FIGURE 91. AMPLIFICATION FACTOR IN YAW, N50N85 JETS

01N85N50 LARC CFHT 118 (MA-22)

(CJA106)

SYMBOL	T/OA-1	PARAMETRIC VALUES			
○	47.500	MACH	10.330	ALPHA	20.000
□	95.000	BDPLAP	.000	T/OA	95.000
◇	127.700	N9.JET	2.000	ELEVON	.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8000	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - ROLL, NCRM)

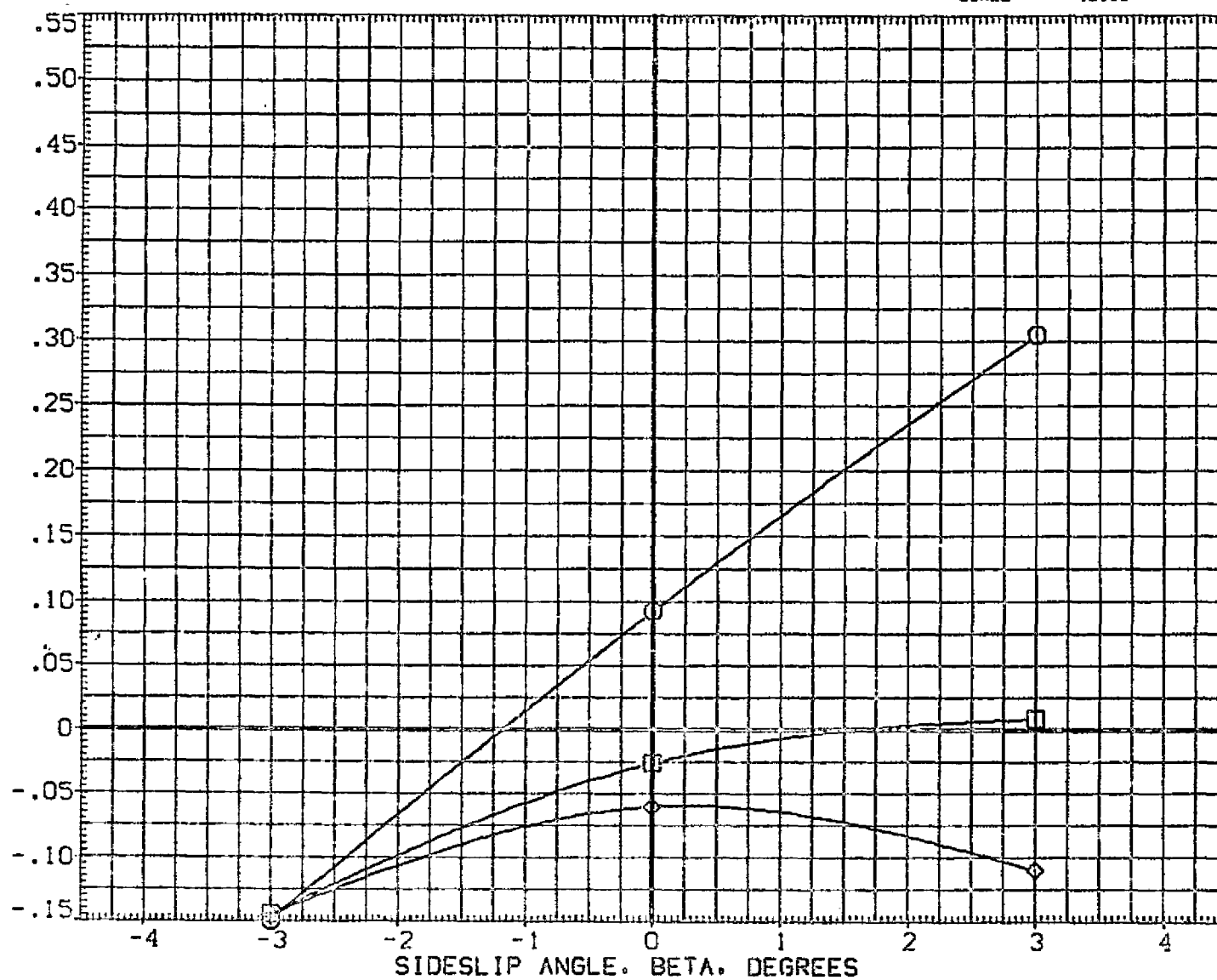


FIGURE 91. AMPLIFICATION FACTOR IN YAW, N50N85 JETS

SYMBOL	T/OA-1	MACH	PARAMETRIC VALUES	ALPHA	35.000
○	47.500	80FLAP	.000	T/OA	95.000
□	95.000	NO.JET	2.000	ELEVON	.000
◇	127.700				

REFERENCE INFORMATION		
SREF	2800.0000	50.FT.
LREF	471.0000	INCHES
BREF	936.6800	INCHES
XMRP	1075.7000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - ROLL, N(RM)

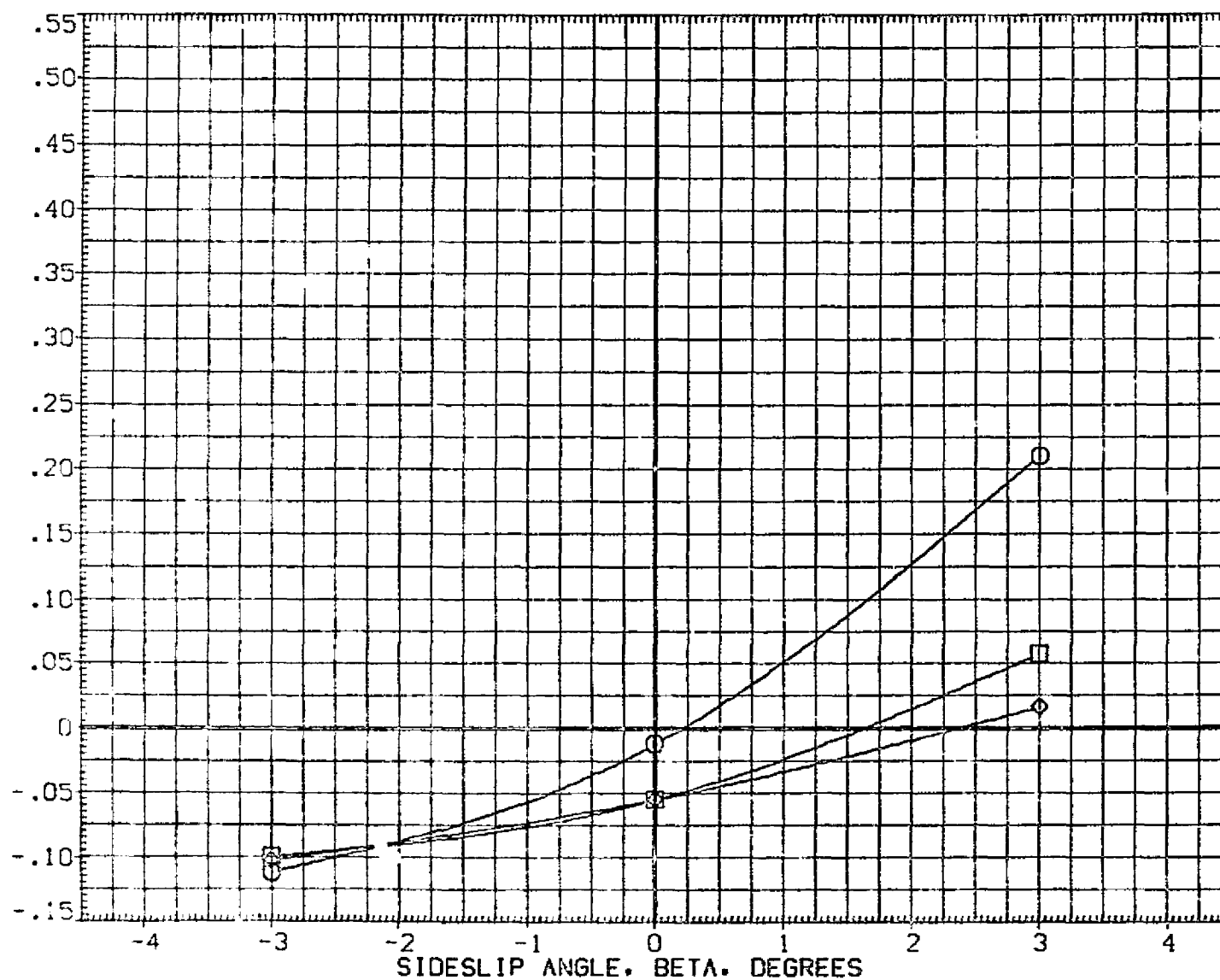


FIGURE 91. AMPLIFICATION FACTOR IN YAW, N50N85 JETS

SYMBOL	T/QA-1	PARAMETRIC VALUES			
○	47.500	MACH	10.330	ALPHA	-10.000
□	95.000	BDFLAP	.000	T/QA	95.000
◇	127.700	NO.JET	2.000	ELEVON	.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8000	INCHES
BREF	935.6800	INCHES
XMRP	107E.7000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	37E.0000	IN. Z0
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - YAW, NCMY

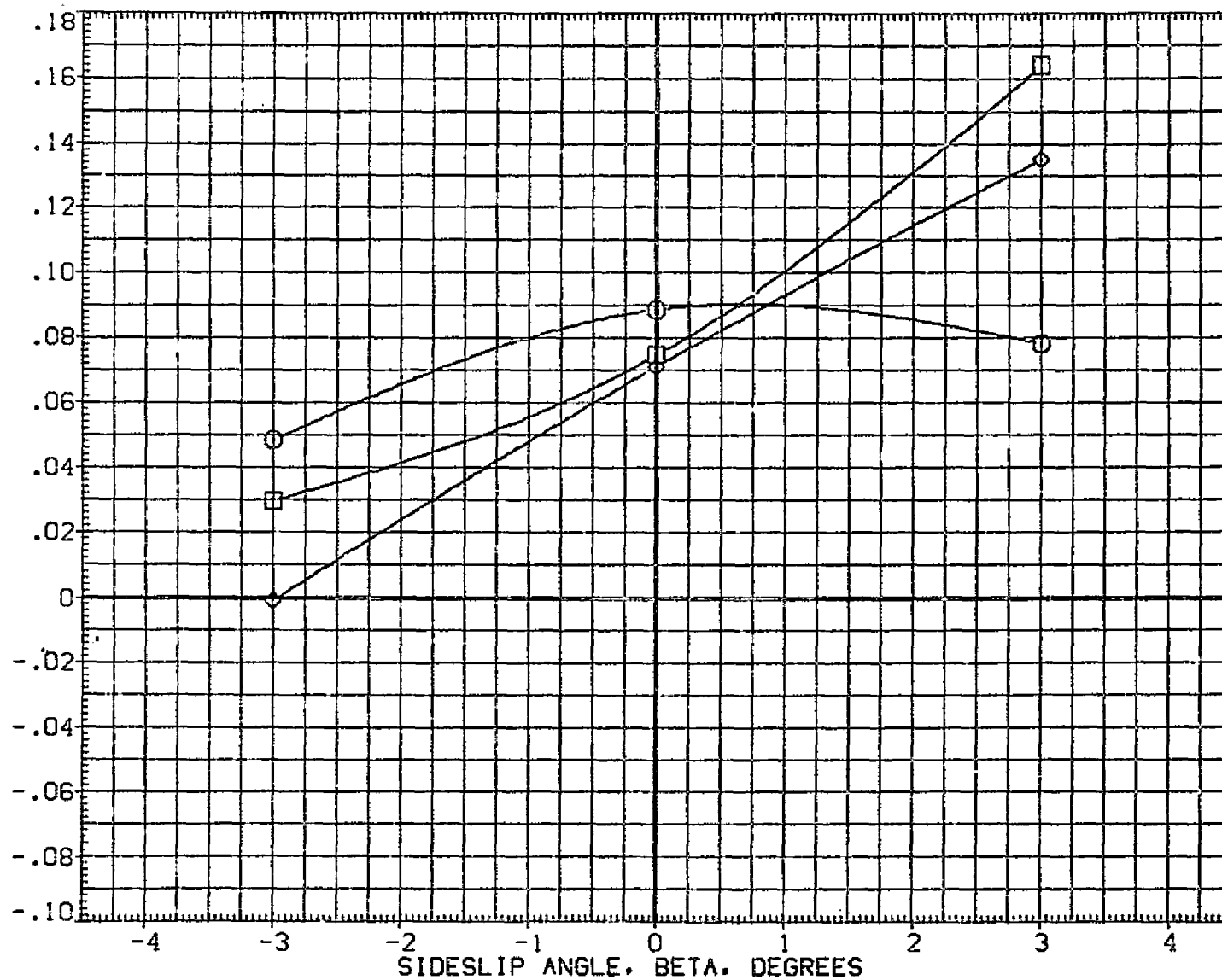


FIGURE 91. AMPLIFICATION FACTOR IN YAW, N50N85 JETS

SYMBOL	T/QA-1	MACH	PARAMETRIC VALUES
○	47.500	10.330	ALPHA .000
□	95.000	.000	T/QA 95.000
◇	127.700	2.000	ELEVON .000

REFERENCE INFORMATION	
SREF	2690.0000 SQ. FT.
LREF	474.8000 INCHES
BREF	936.6800 INCHES
XMRP	1076.7000 IN. X0
YMRP	.0000 IN. Y0
ZMRP	375.0000 IN. Z0
SCALE	.0100

RCS JET AMPLIFICATION FACTOR - YAW, N(YM)

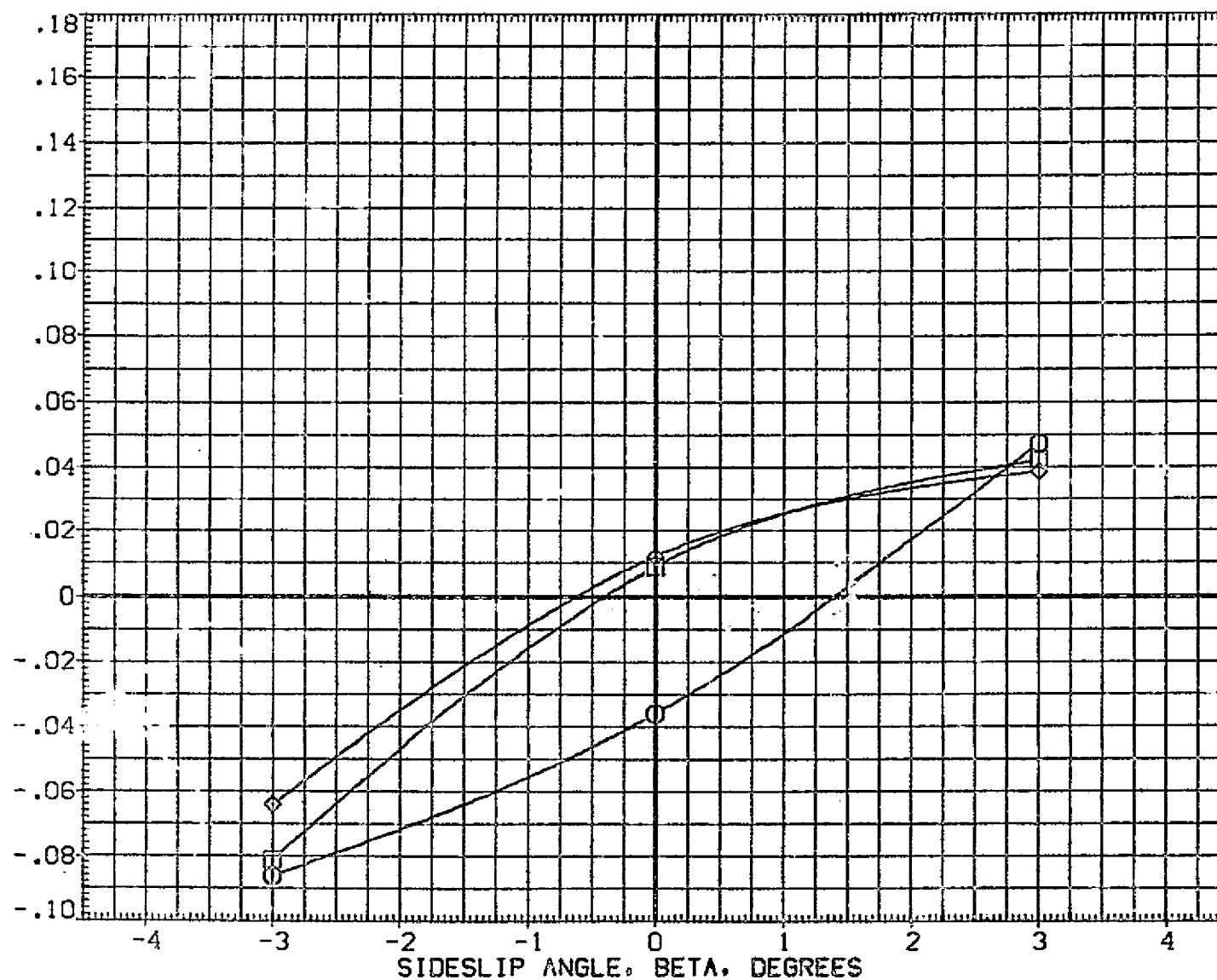


FIGURE 91. AMPLIFICATION FACTOR IN YAW, N50N85 JETS

01N85N50 LARC CFHT 118 (MA-22)

(CJA106)

SYMBOL	T/QA-1	PARAMETRIC VALUES
○	47.500	MACH 10.330 ALPHA 10.000
□	95.000	BDFLAP .000 T/QA 95.000
◇	127.700	NO.JET 2.000 ELEVON .000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8000	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - YAW, N(CYM)

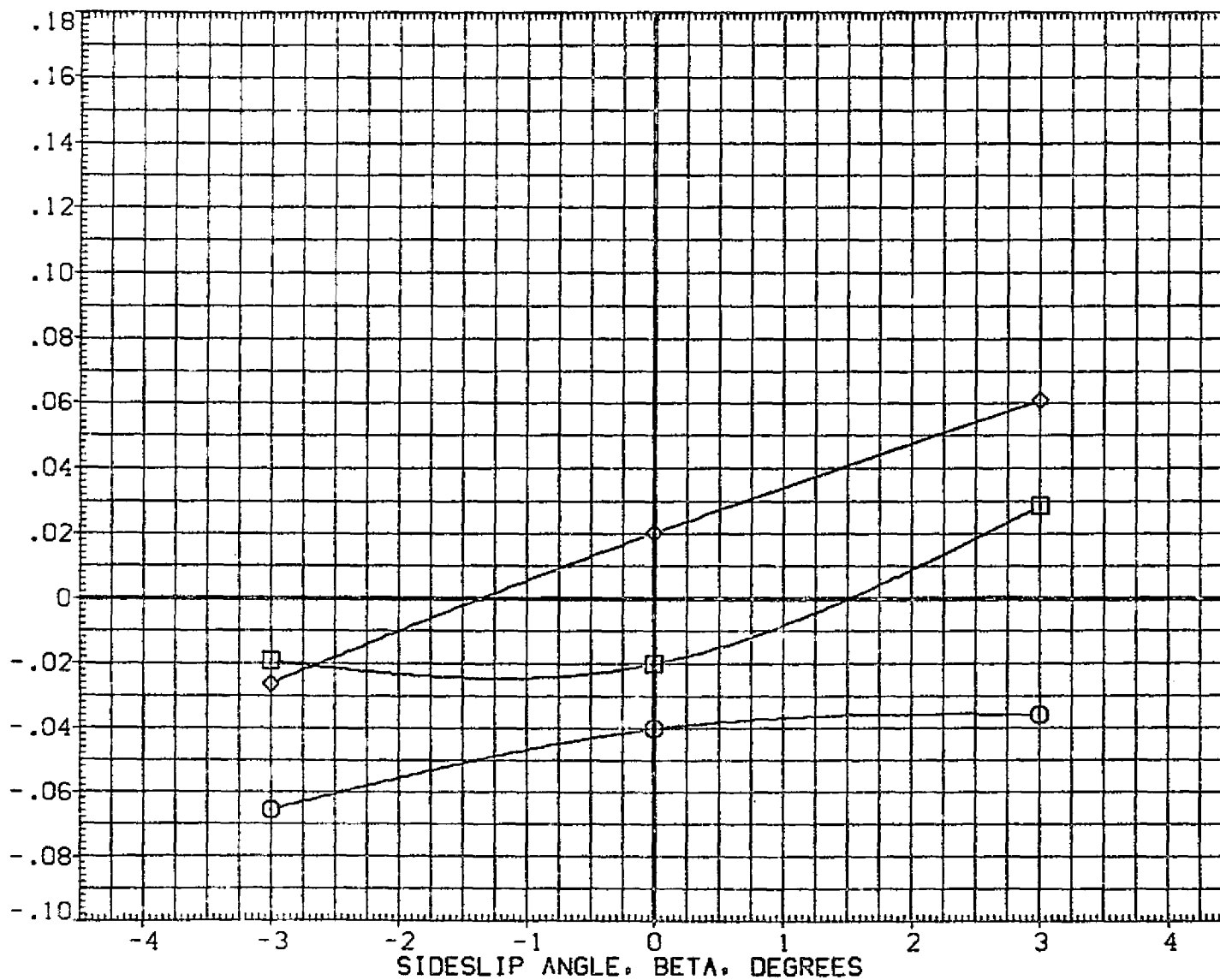


FIGURE 91. AMPLIFICATION FACTOR IN YAW, N50N85 JETS

SYMBOL	T/QA-1	PARAMETRIC VALUES
○	47.500	MACH 10.330 ALPHA 20.000
□	95.000	BDFLAP .000 T/QA 95.000
◇	127.700	NO JET 2.000 ELEVON .000

REFERENCE INFORMATION		
SREF	2690.0000	50. FT.
LREF	474.8000	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	3.5.0000	IN. Z0
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - YAW, N(CYM)

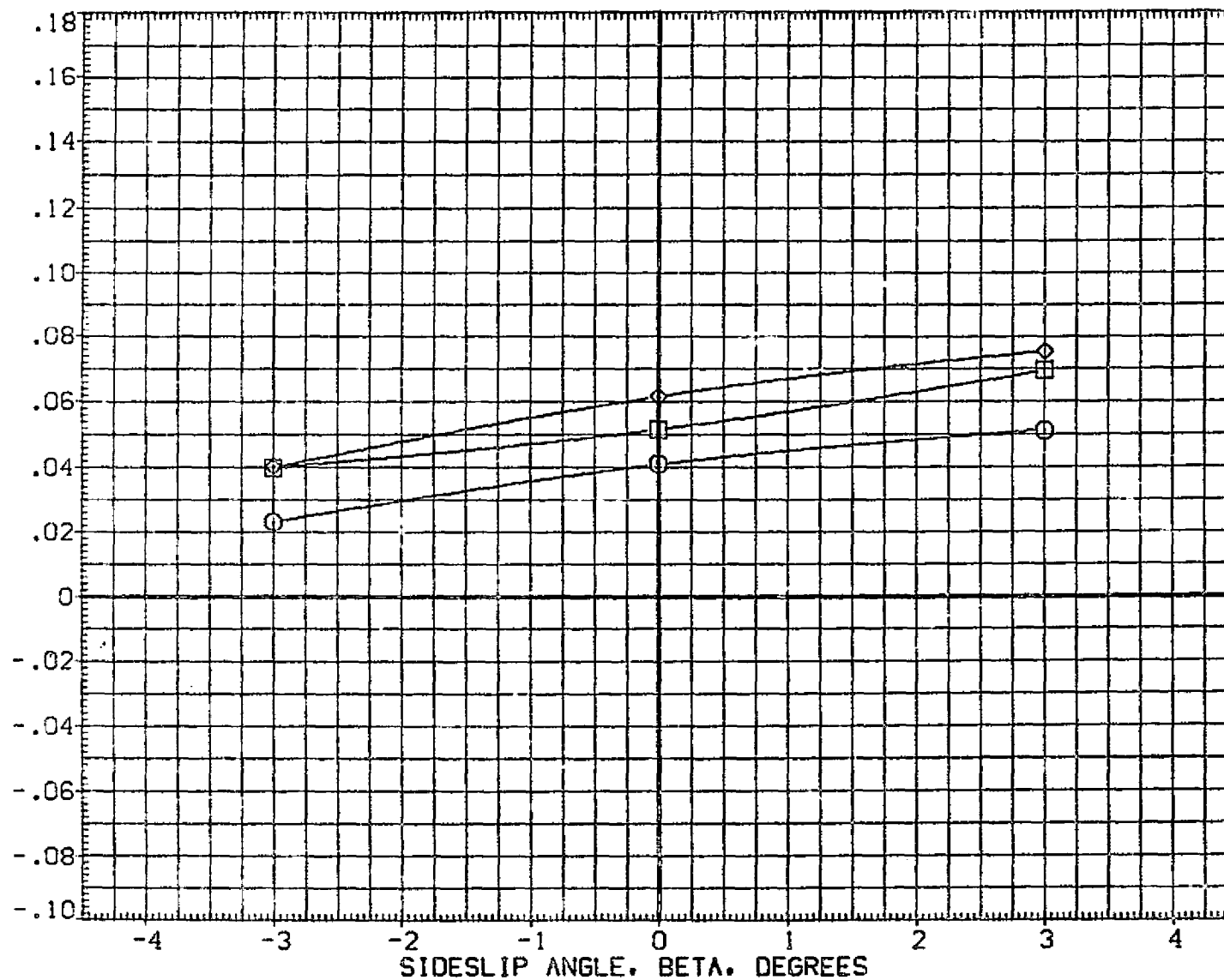


FIGURE 91. AMPLIFICATION FACTOR IN YAW, N50N85 JETS

01N85N50 LARC CFHT 118 (MA-22)

(CJA106)

SYMBOL	T/OA-1	MACH	PARAMETRIC VALUES	ALPHA	35.000
○	47.500	BDFLAP	.000	T/OA	95.000
◇	127.700	NO.JET	2.000	ELEVON	.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8000	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - YAW, N(YM)

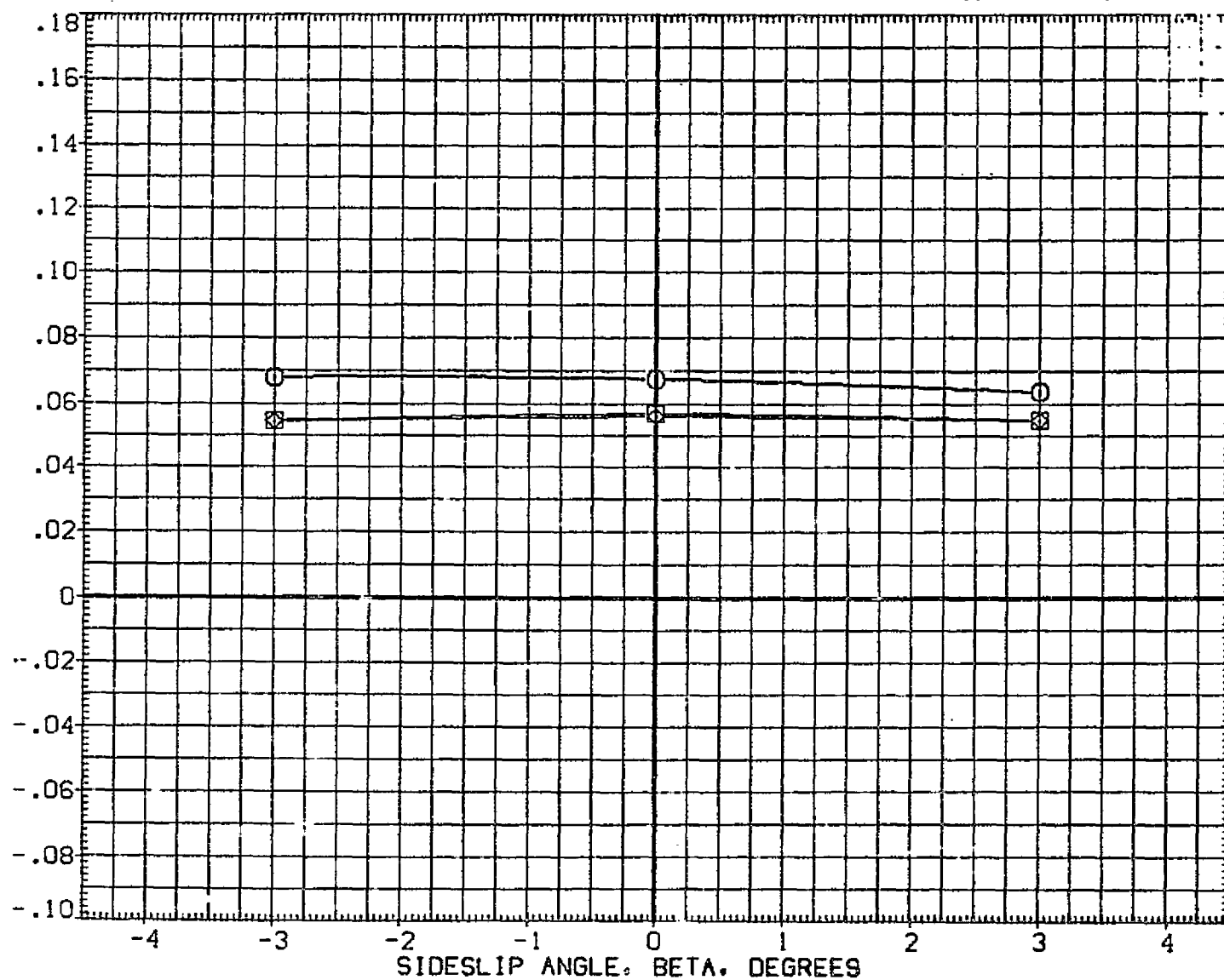


FIGURE 91. AMPLIFICATION FACTOR IN YAW, N50N85 JETS

SYMBOL	T/QA-1	MACH	PARAMETRIC VALUES	ALPHA	T/QA
○	47.500	10.330	~10.000	95.000	
□	95.000	.000			
◇	127.700	NO.JET	2.000	ELEVON	.000

REFERENCE INFORMATION	
SREF	2690.0000 SQ.FT.
LREF	474.8000 INCHES
BREF	936.6800 INCHES
XMRP	1076.7000 IN. X0
YMRP	.0000 IN. Y0
ZMRP	375.0000 IN. Z0
SCALE	.0100

RCS JET AMPLIFICATION FACTOR - NORMAL FORCE, N(NF)

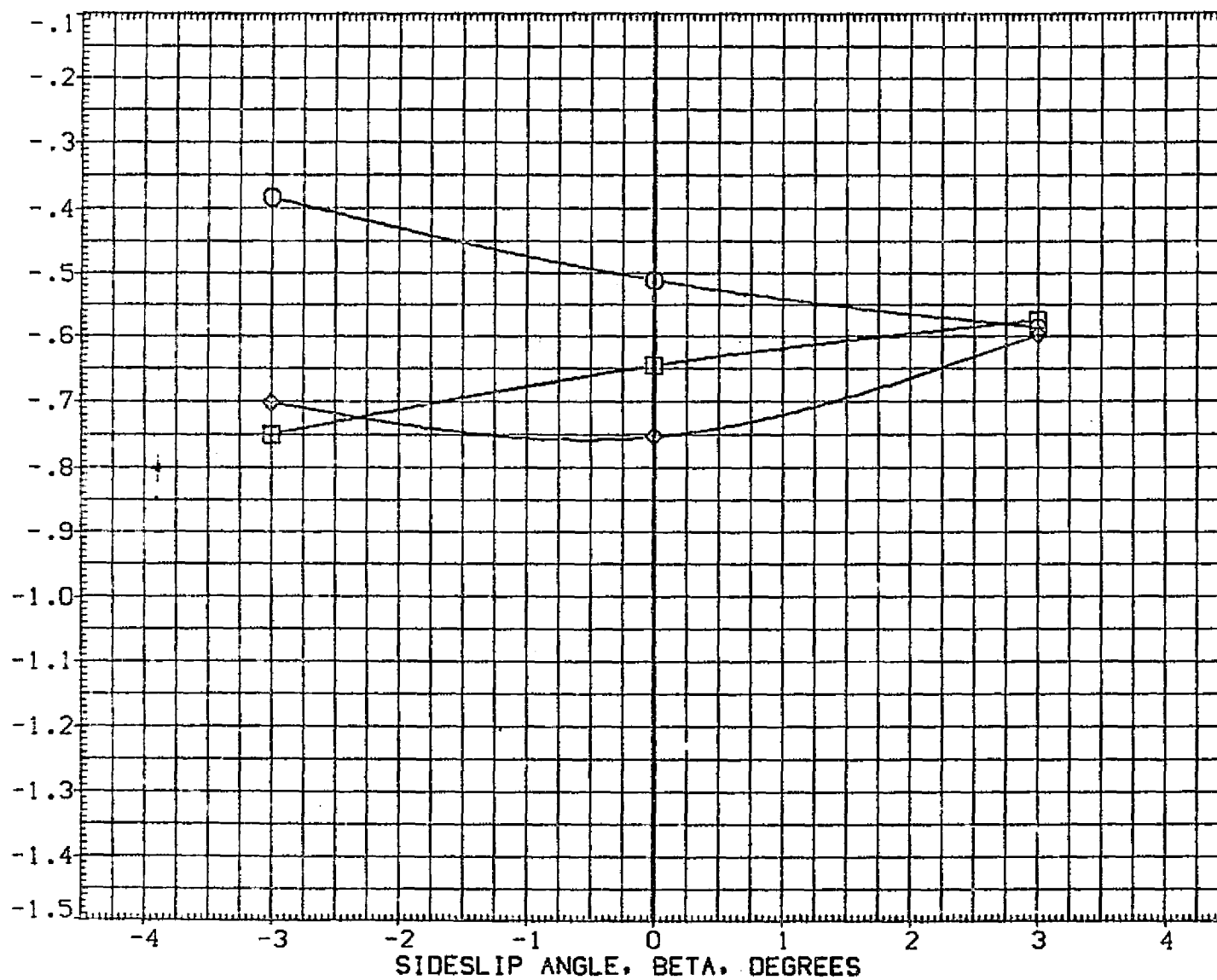


FIGURE 91. AMPLIFICATION FACTOR IN YAW, N50N85 JETS

SYMBOL	T/QA-1	PARAMETRIC VALUES
○	47.500	MACH 10.330 ALPHA .000
□	95.000	BDFLAP .000 T/QA 95.000
◇	127.700	NO.JET 2.000 ELEVON .000

REFERENCE INFORMATION		
SREF	2690.0000	50.FT.
LREF	474.8000	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - NORMAL FORCE, N(NF)

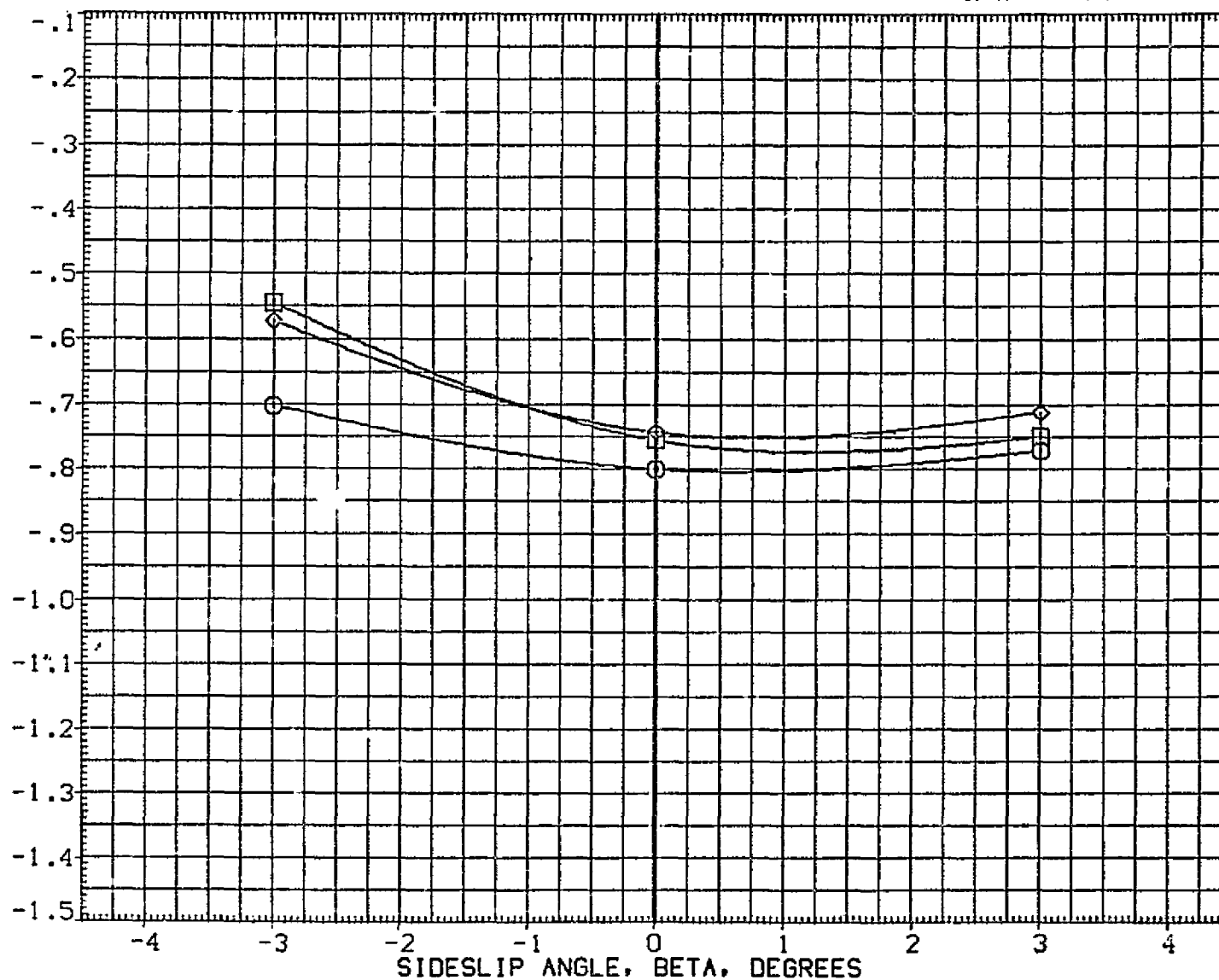


FIGURE 91. AMPLIFICATION FACTOR IN YAW, N50N85 JETS

SYMBOL	T/OA-1	PARAMETRIC VALUES			
○	47.500	MACH	10.330	ALPHA	10.000
□	95.000	BDFLAP	.000	T/OA	95.000
◇	127.700	NO.JET	2.000	ELEVON	.000

REFERENCE INFORMATION		
SREF	2690.0000	CG.FT.
LREF	474.8000	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - NORMAL FORCE, N(NF)

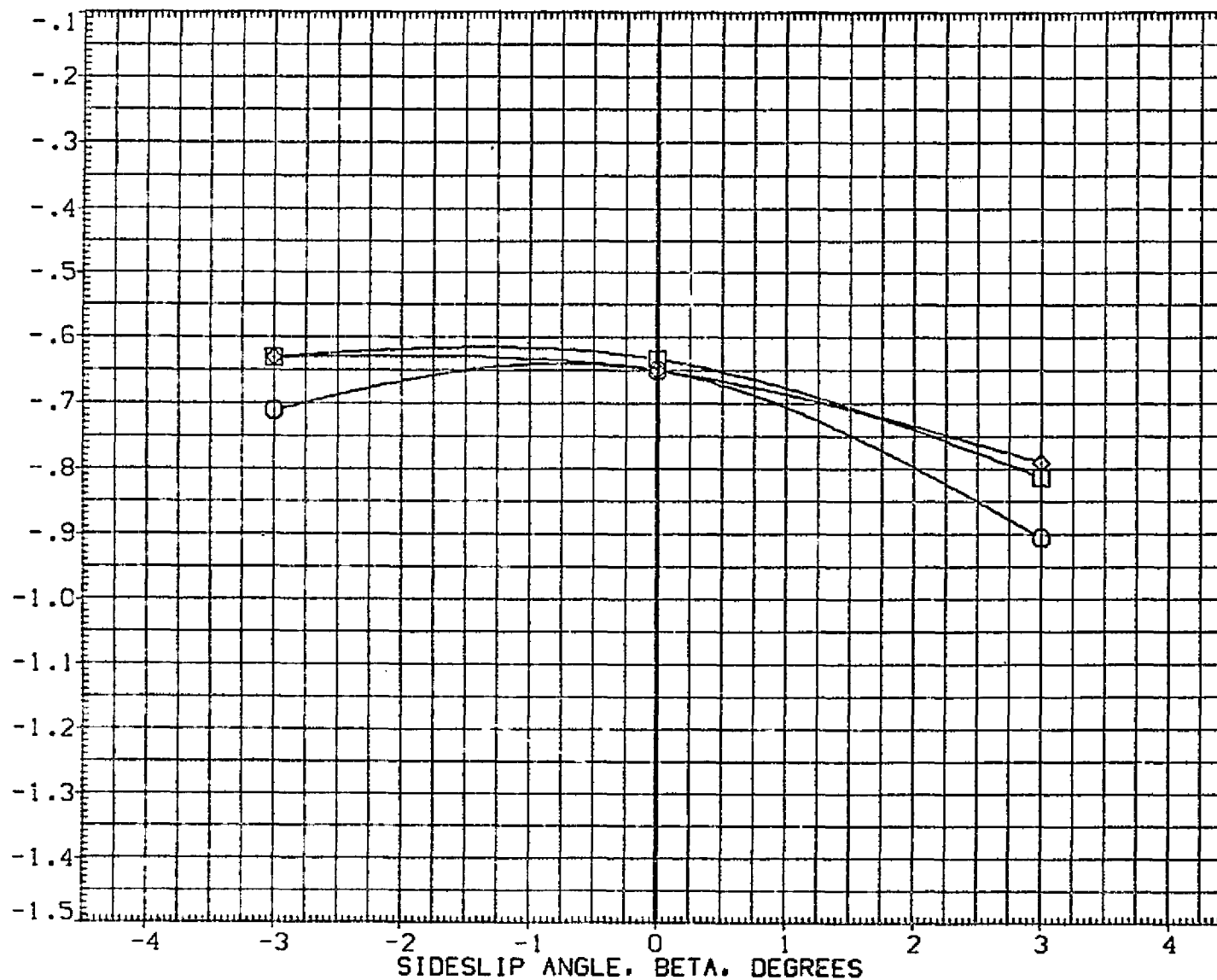


FIGURE 91. AMPLIFICATION FACTOR IN YAW, N50N85 JETS

SYMBOL	T/OA-1	PARAMETRIC VALUES
○	47.500	MACH 10.330 ALPHA 20.000
□	95.000	BDFLAP .000 T/OA 95.000
◇	127.700	NO.JET 2.000 ELEVON .000

REFERENCE INFORMATION	
SREF	2690.0000 SQ.FT.
LREF	474.8000 INCHES
BREF	936.6800 INCHES
XMRP	1076.7000 IN. X0
YMRP	.0000 IN. Y0
ZMRP	375.0000 IN. Z0
SCALE	.0100

RCS JET AMPLIFICATION FACTOR - NORMAL FORCE, N(NF)

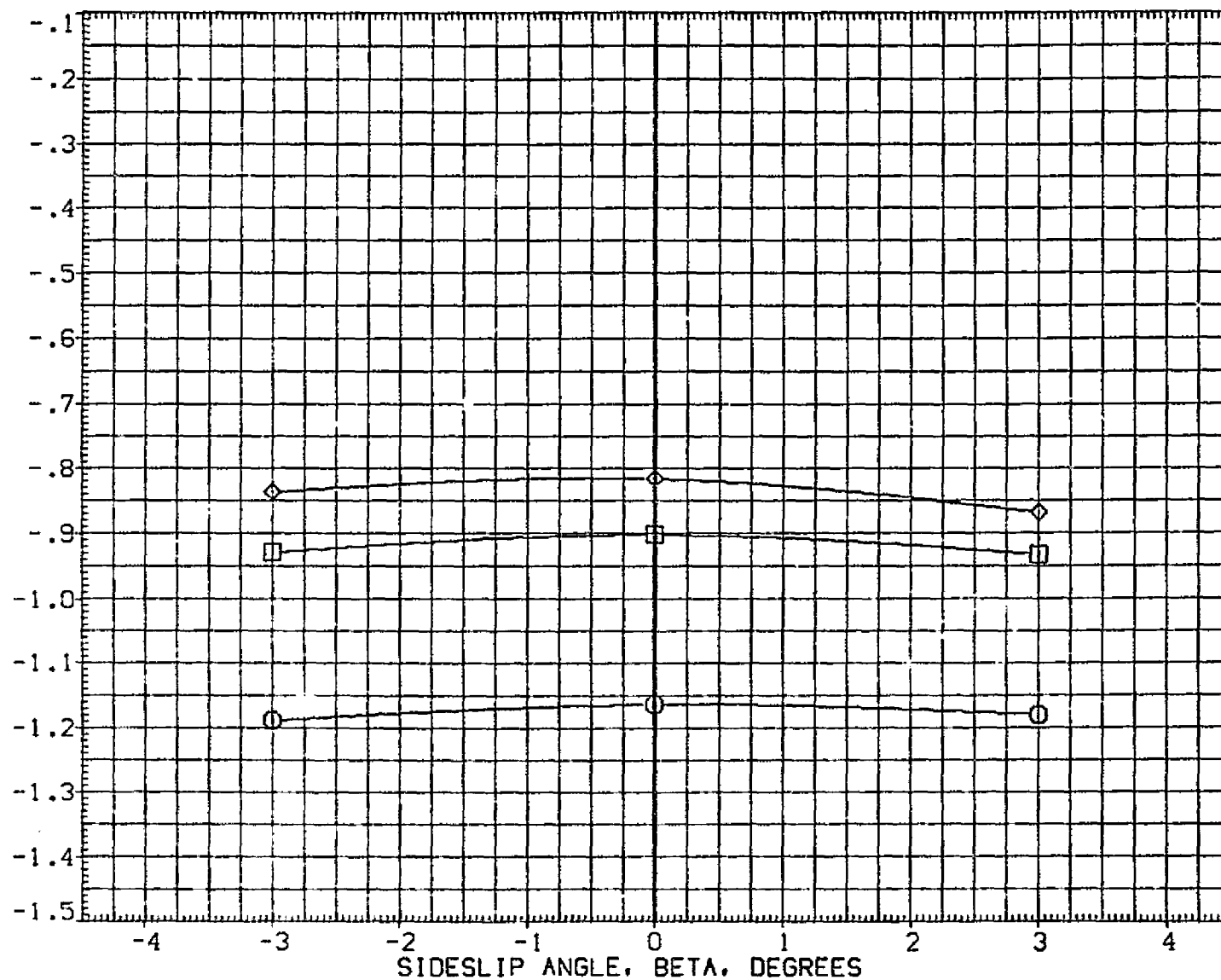


FIGURE 91. AMPLIFICATION FACTOR IN YAW, N50N85 JETS

SYMBOL	T/QA-1	MACH	PARAMETRIC VALUES		
○	47.500		10.330	ALPHA	35.000
□	95.000	BDFLAP	.000	T/QA	95.000
◇	127.700	NO.JET	2.000	ELEVON	.000

REFERENCE INFORMATION		
SREF	2690.0000	50.FT.
LREF	474.8000	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

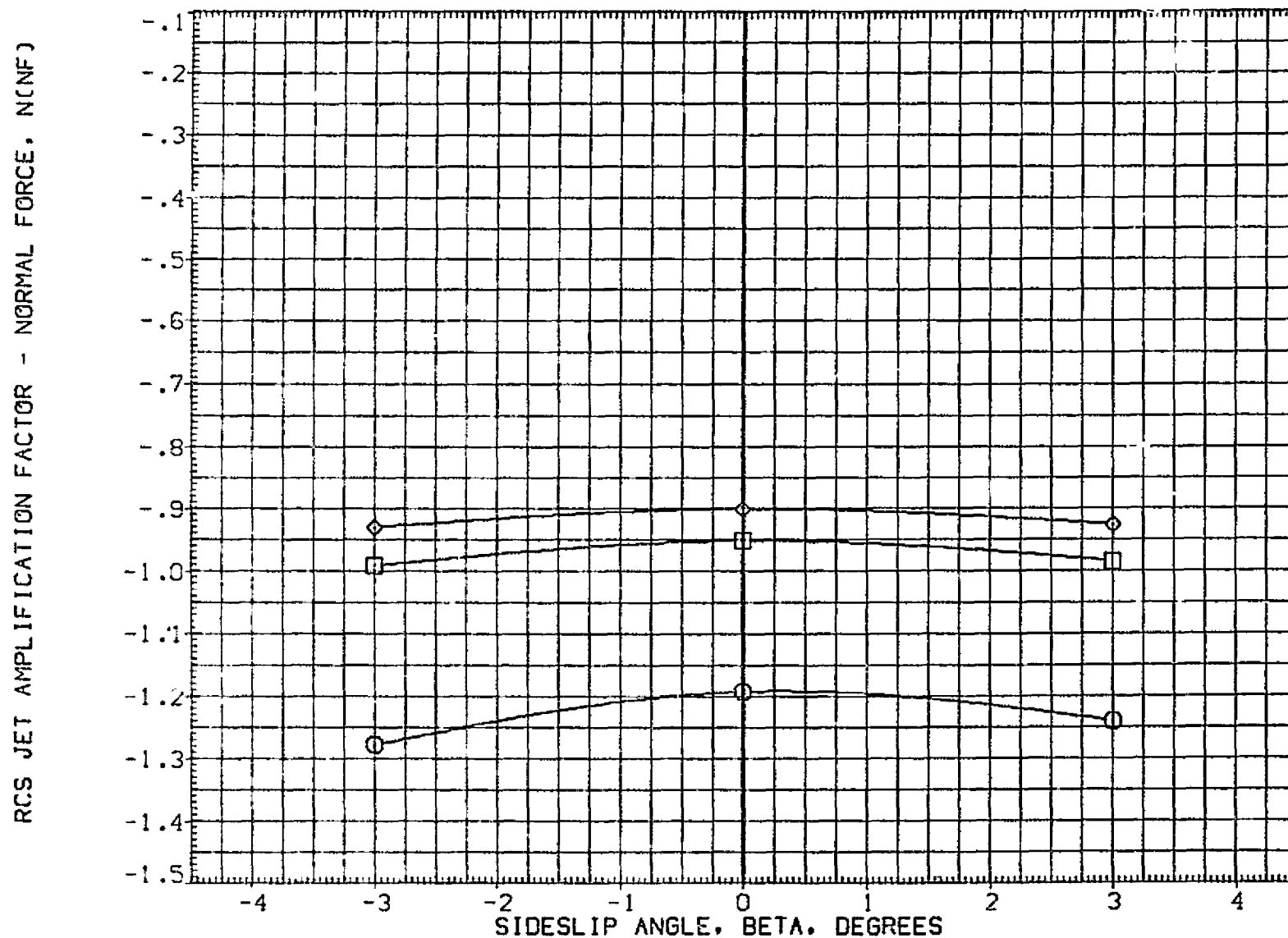


FIGURE 91. AMPLIFICATION FACTOR IN YAW, N50N85 JETS

01N85N50 LARC CFHT 118 (MA-22)

(CJA106)

SYMBOL	T/QA-1	PARAMETRIC VALUES
○	47.500	MACH 10.330 ALPHA -10.000
□	95.000	BDFLAP .000 T/QA 95.000
◇	127.700	NO JET 2.000 ELEVON .000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8000	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - AXIAL FORCE, N(AF)

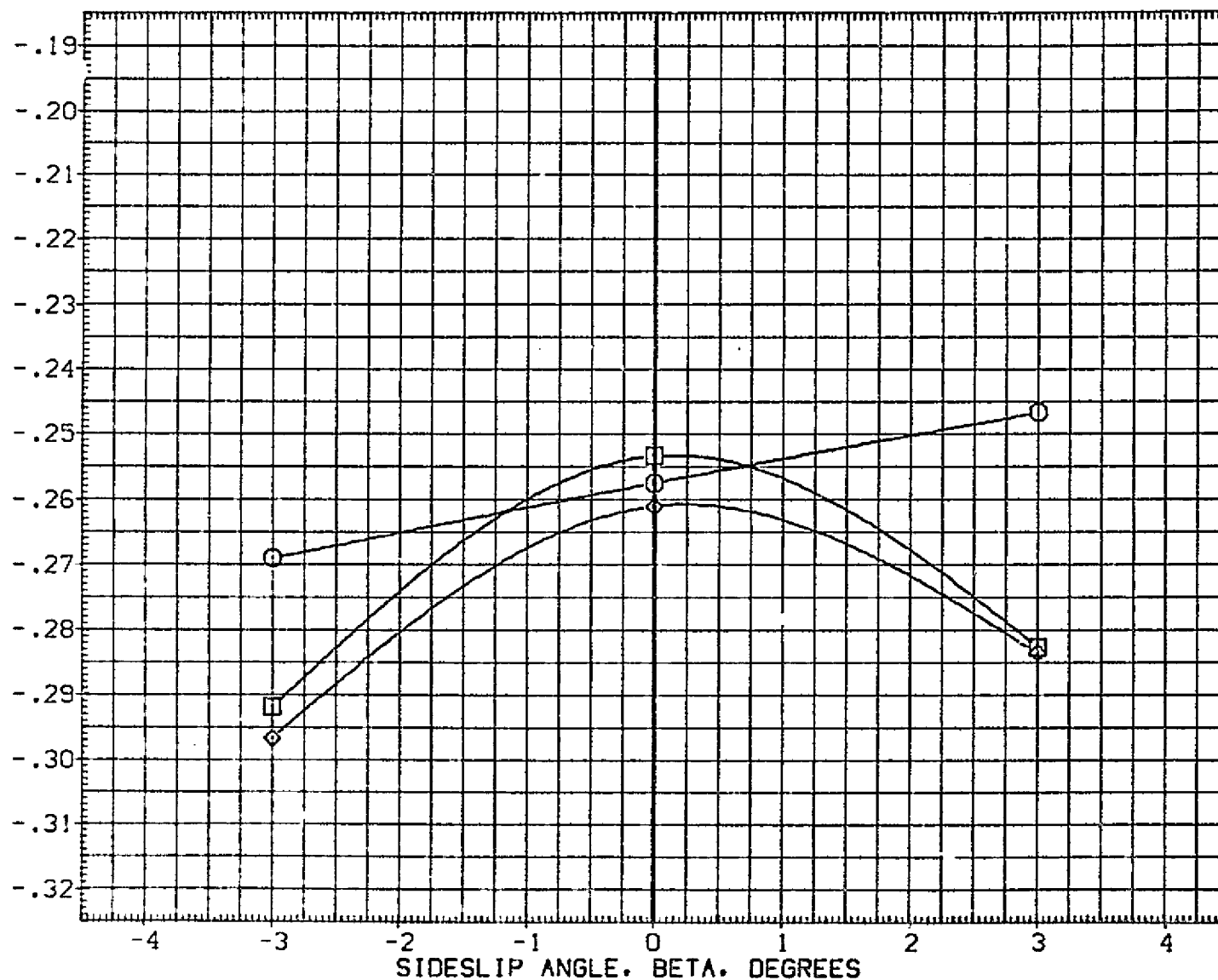


FIGURE 91. AMPLIFICATION FACTOR IN YAW, N50N85 JETS

SYMBOL

○
□
◇

T/QA-1

47.500

MACH

PARAMETRIC VALUES

10.330

ALPHA

.000

BDFLAP

.000

T/QA

95.000

NO.JET

2.000

ELEVON

.000

REFERENCE INFORMATION

SREF 2690.0000

50.FT.

LREF 474.8000

INCHES

BREF 936.6800

INCHES

XMRP 1076.7000

IN. X0

YMRP .0000

IN. Y0

ZMRP 375.0000

IN. Z0

SCALE .0100

RCS JET AMPLIFICATION FACTOR - AXIAL FORCE, N(AF)

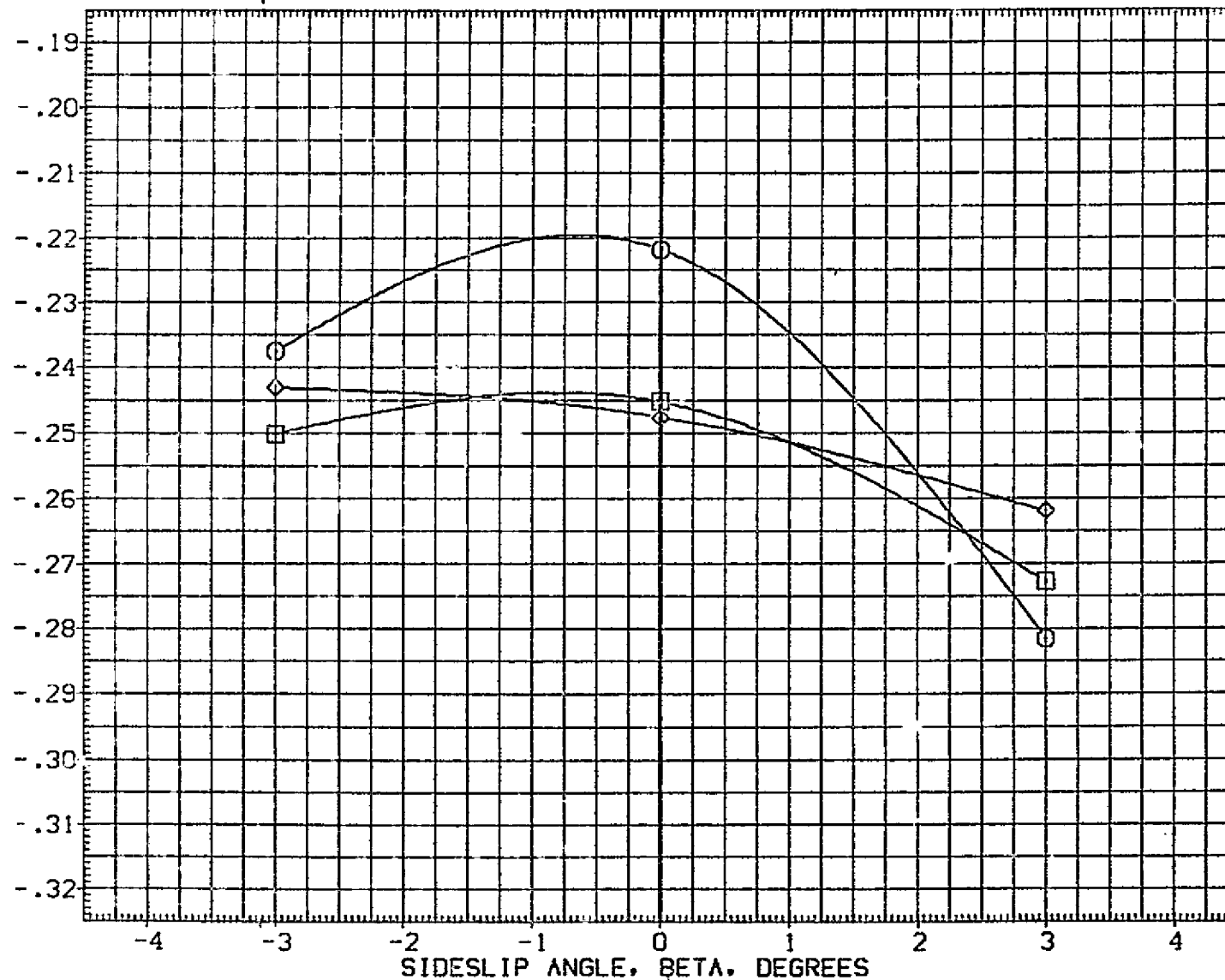


FIGURE 91. AMPLIFICATION FACTOR IN YAW, N50N85 JETS

01N85N50 LARC CFHT 118 (MA-22)

(CJA106)

SYMBOL	T/OA-1	MACH	PARAMETRIC VALUES	ALPHA	10.000
○	47.500	BDFLAP	.000	1/0A	95.000
□	95.000	NO.JET	2.000	ELEVON	.000
◇	127.700				

REFERENCE INFORMATION	
SREF	2690.0000 SQ.FT.
LREF	474.8000 INCHES
BREF	936.6800 INCHES
XMRP	1076.7000 IN. X0
YMRP	.0000 IN. Y0
ZMRP	375.0000 IN. Z0
SCALE	.0100

RCS JET AMPLIFICATION FACTOR - AXIAL FORCE, N(AF)

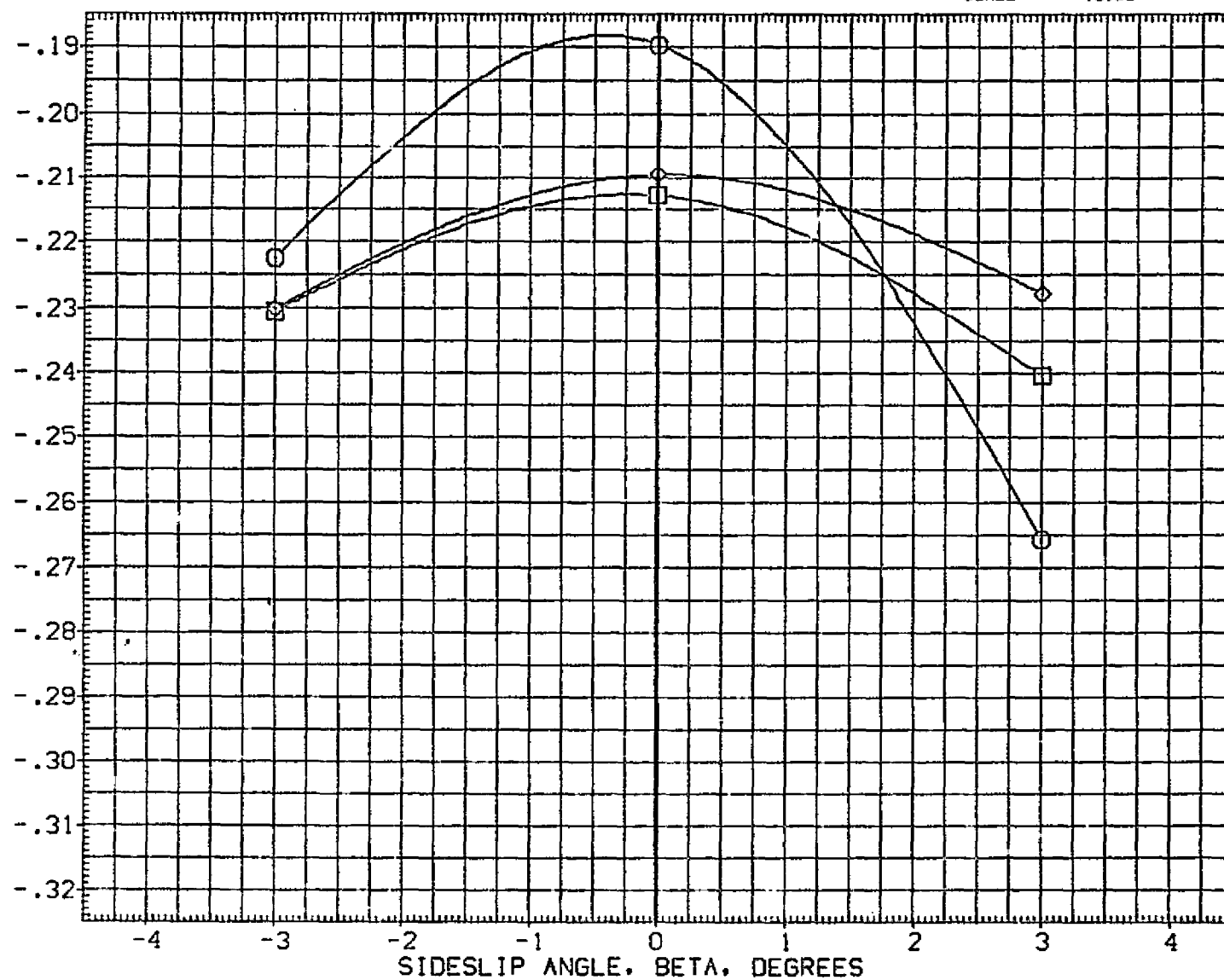


FIGURE 91. AMPLIFICATION FACTOR IN YAW, N50N85 JETS

SYMBOL	T/QA-1	PARAMETRIC VALUES
○	47.500	MACH 10.330 ALPHA 20.000
□	95.000	BDPLAP .000 T/QA 95.000
◇	127.700	NO.JET 2.000 ELEVON .000

REFERENCE INFORMATION		
SREF	2690.0000	50. FT.
LREF	474.8000	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. YD
YMRP	.0000	IN. YD
ZMRP	375.0000	IN. YD
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - AXIAL FORCE, N(AF)

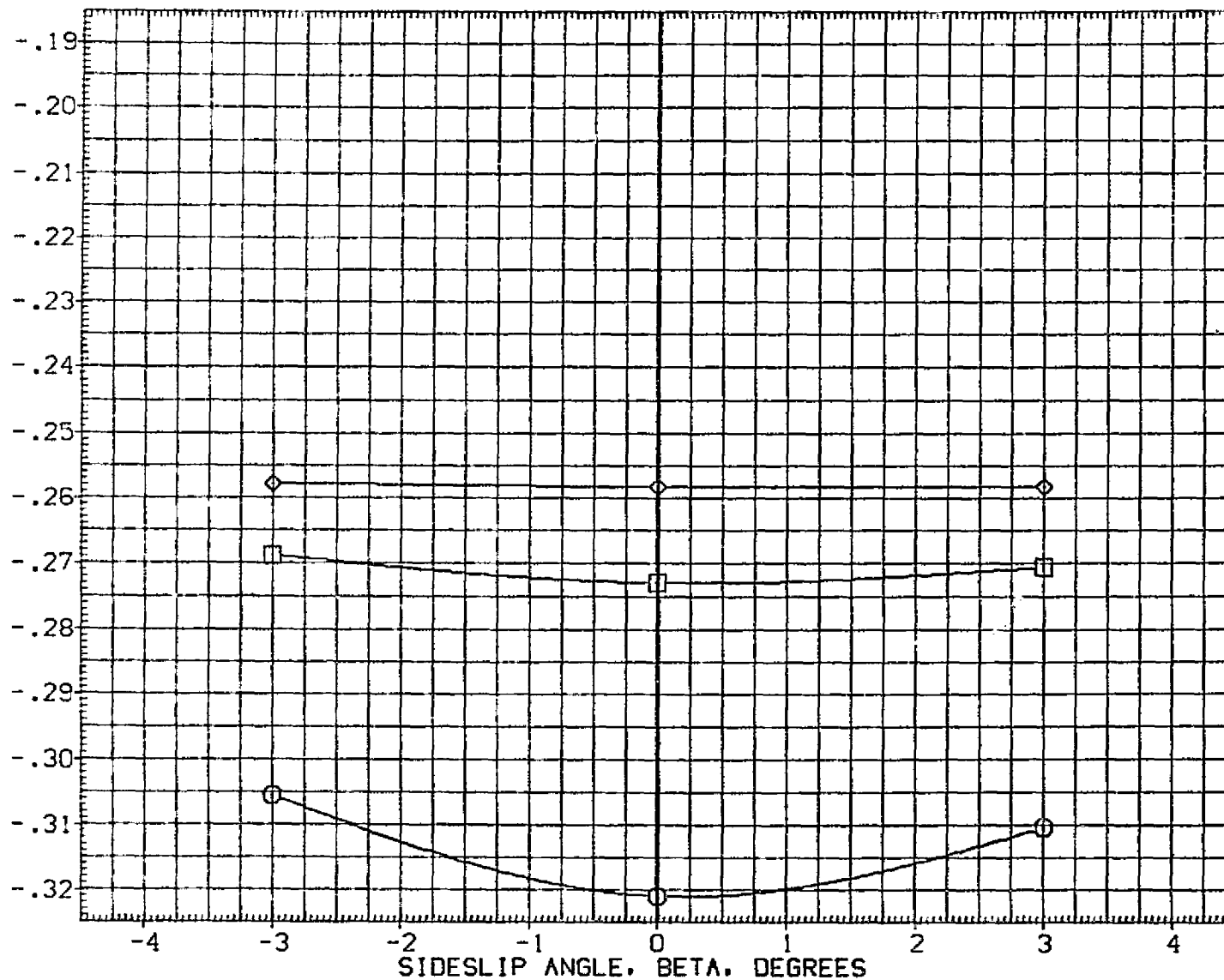


FIGURE 91. AMPLIFICATION FACTOR IN YAW, N50N85 JETS

01N85N50 LARC CFHT 118 (MA-22)

(CJA106)

SYMBOL	T/QA-1	PARAMETRIC VALUES
○	47.500	MACH 10.330 ALPHA 35.000
□	95.000	BDFLAP .000 T/QA 95.000
◇	127.700	NO.JET 2.000 ELEVON .000

REFERENCE INFORMATION	
SREF	2690.0000 SQ.FT.
LREF	474.8000 INCHES
BREF	936.6800 INCHES
XMRP	1076.7000 IN. X0
YMRP	.0000 IN. Y0
ZMRP	375.0000 IN. Z0
SCALE	.0100

RCS JET AMPLIFICATION FACTOR - AXIAL FORCE, N(AF)

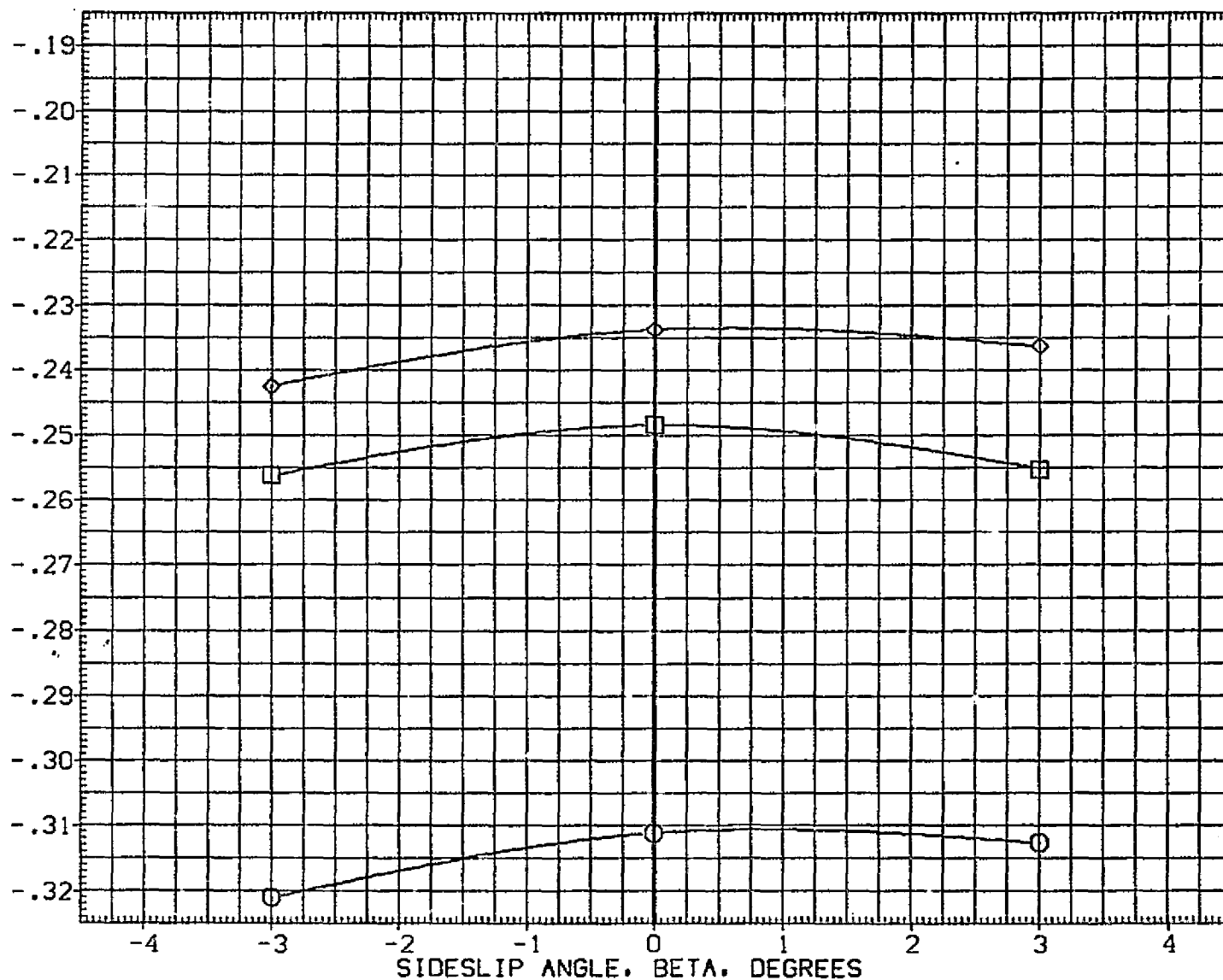


FIGURE 91. AMPLIFICATION FACTOR IN YAW, N50N85 JETS

SYMBOL	T/QA-1	MACH	PARAMETRIC VALUES	ALPHA	-10.000
○	47.500	BDFLAP	.000	T/QA	95.000
◇	127.700	NO.JET	2.000	ELEVON	.000

REFERENCE INFORMATION		
SREF	2690.0000	SO.FT.
LREF	474.8000	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0100	

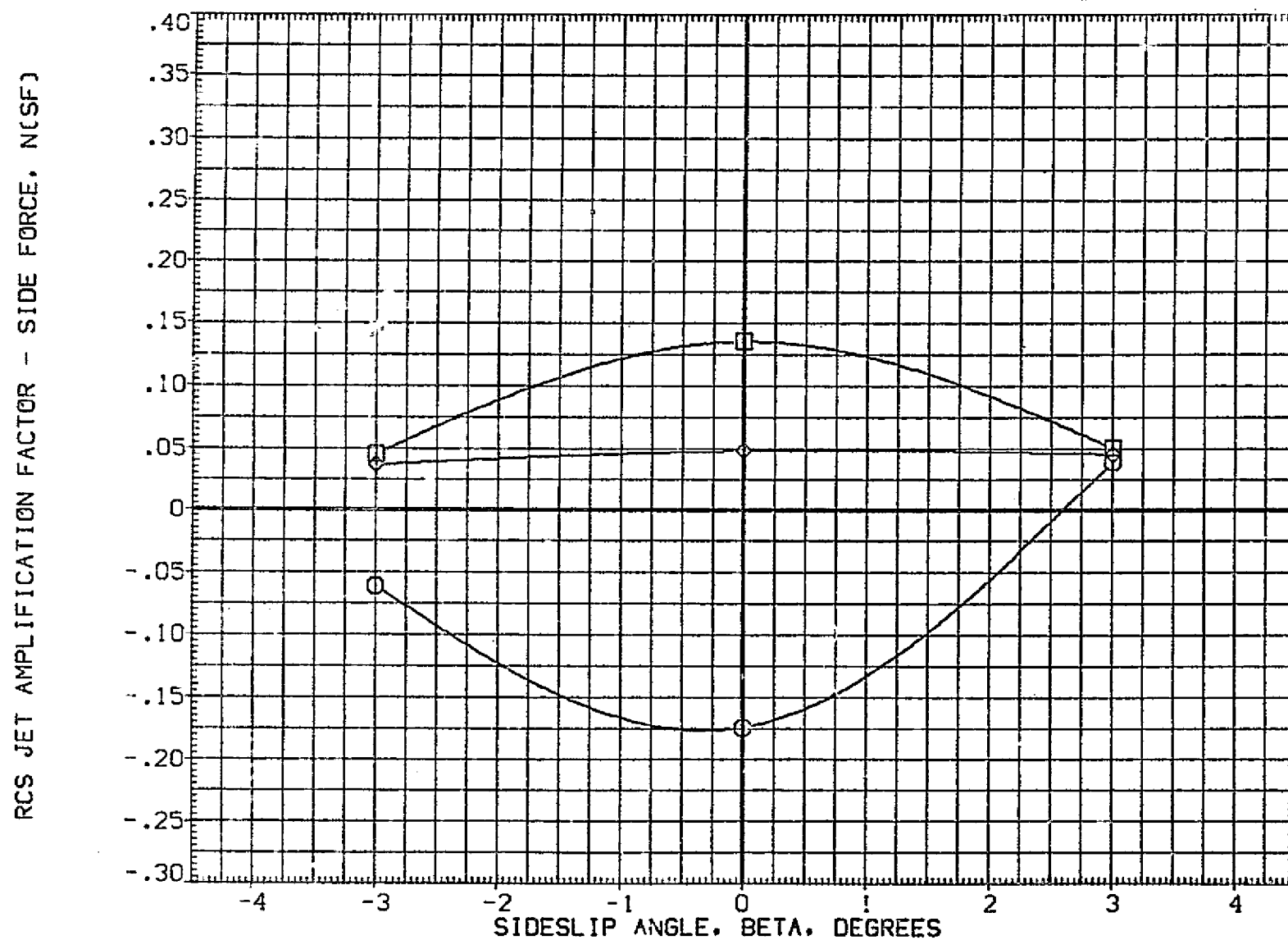


FIGURE 91. AMPLIFICATION FACTOR IN YAW, N50N85 JETS

01N85N50 LARC CFHT 118 (MA-22)

(CJA106)

SYMBOL	T/QA-1	PARAMETRIC VALUES
○	47.500	MACH 10.330 ALPHA .000
□	95.000	BDFLAP .000 T/QA 95.000
◇	127.700	NOJET 2.000 ELEVON .000

REFERENCE INFORMATION		
SREF	2690.0000	50. FT.
LREF	474.8000	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0100	

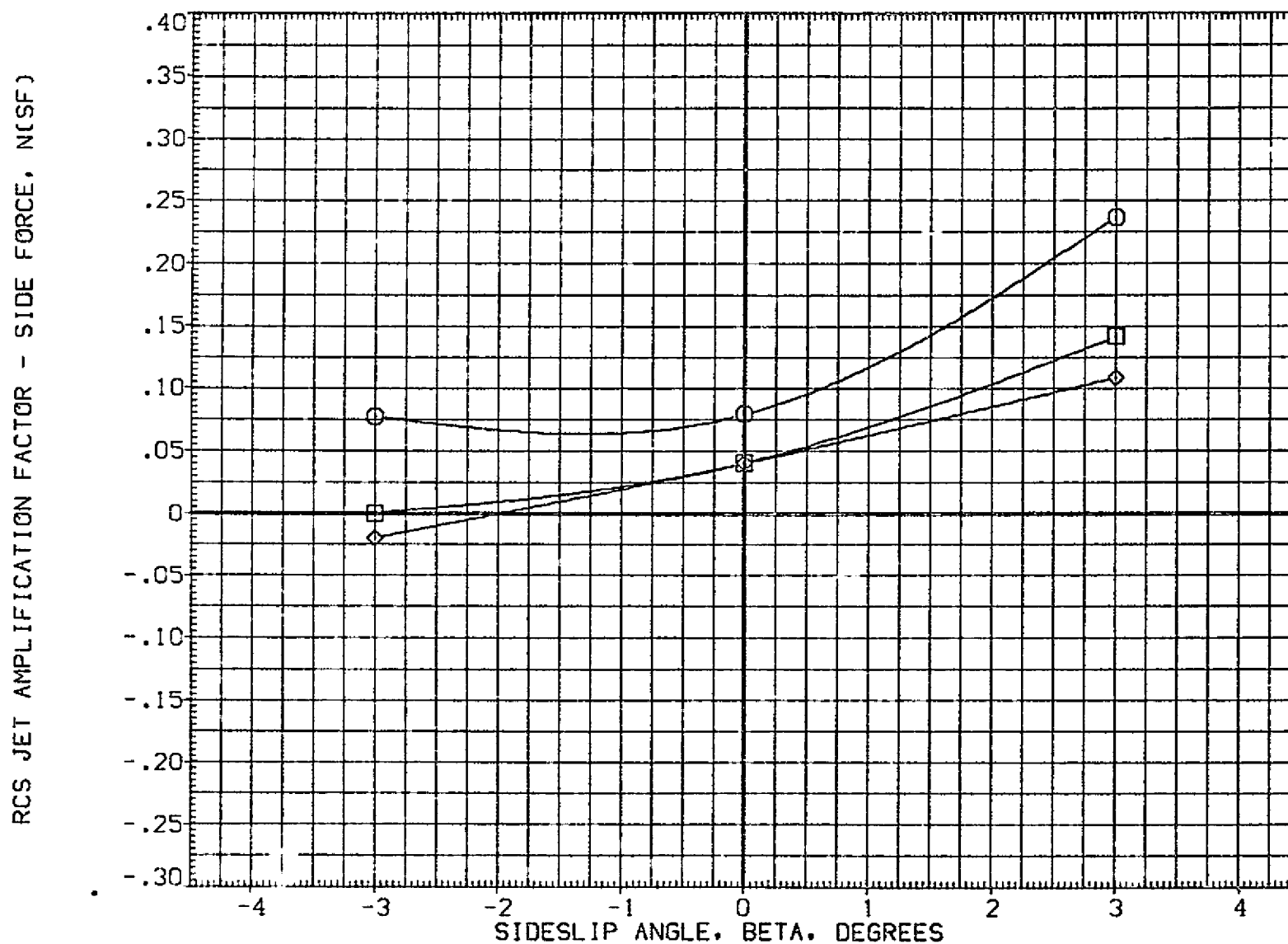


FIGURE 91. AMPLIFICATION FACTOR IN YAW, N50N85 JETS

SYMBOL	T/OA-1	PARAMETRIC VALUES
○	47.500	MACH 10.330 ALPHA 10.000
□	95.000	BDFLAP .000 T/OA 95.000
◇	127.700	NO JET 2.000 ELEVON .000

REFERENCE INFORMATION	
SREF	2690.0000 SQ. FT.
LREF	474.8000 IN.
BREF	936.6800 INCHES
XMRP	1076.7000 IN. XC
YMRP	.0000 IN. YC
ZMRP	375.0000 IN. ZC
SCALE	.0100

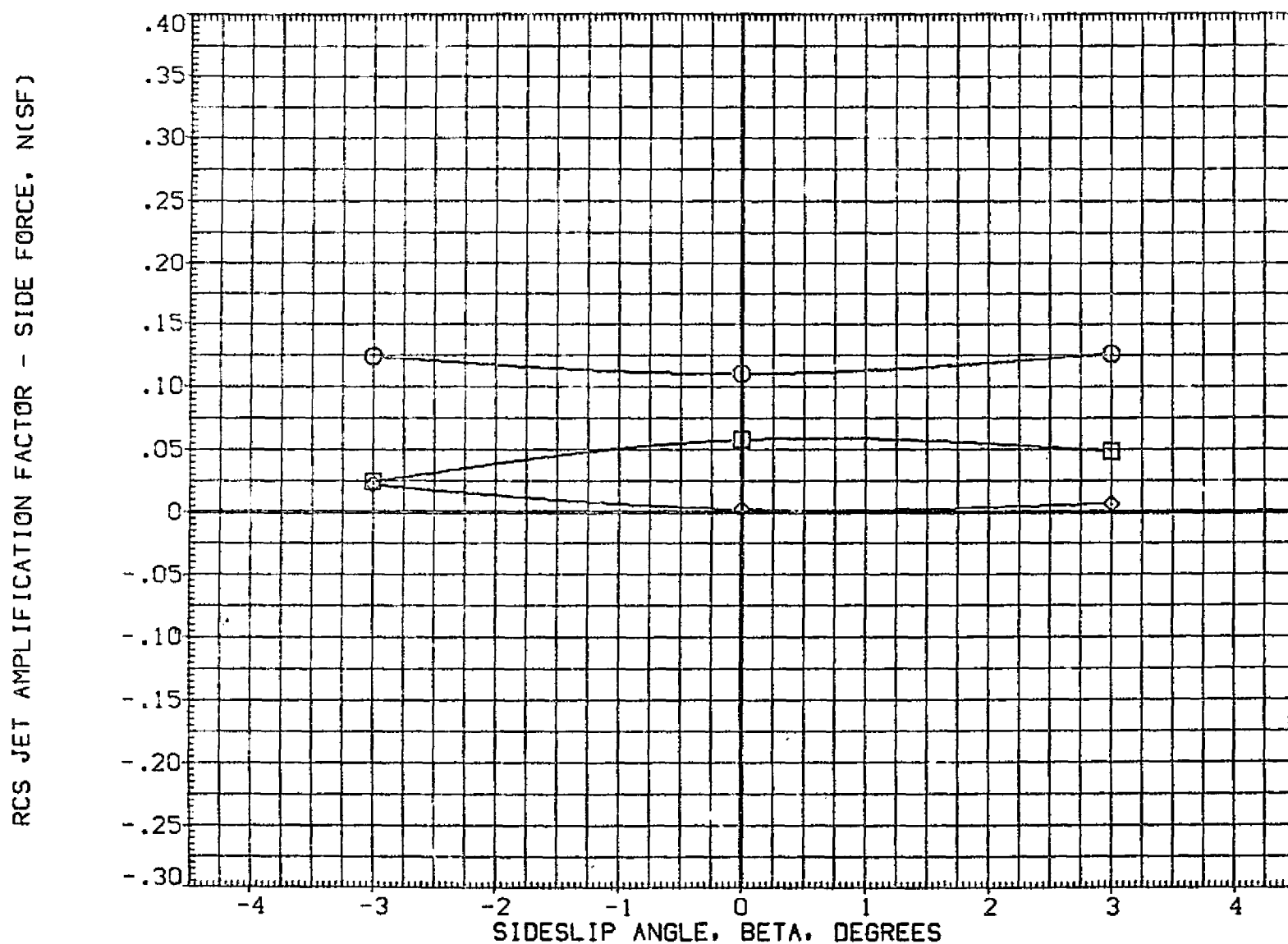


FIGURE 91. AMPLIFICATION FACTOR IN YAW, N50N85 JETS

01N85N50 LARC CFHT 118 (MA-22)

(CJA106)

SYMBOL	T/QA-1	MACH	PARAMETRIC VALUES		
○	47.500	10.330	ALPHA	20.000	
□	95.000	.000	T/QA	95.000	
◇	127.700	2.000	ELEVON	.000	

REFERENCE INFORMATION		
SREF	2690.0000	SQ. FT.
LREF	474.8000	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - SIDE FORCE, N(SF)

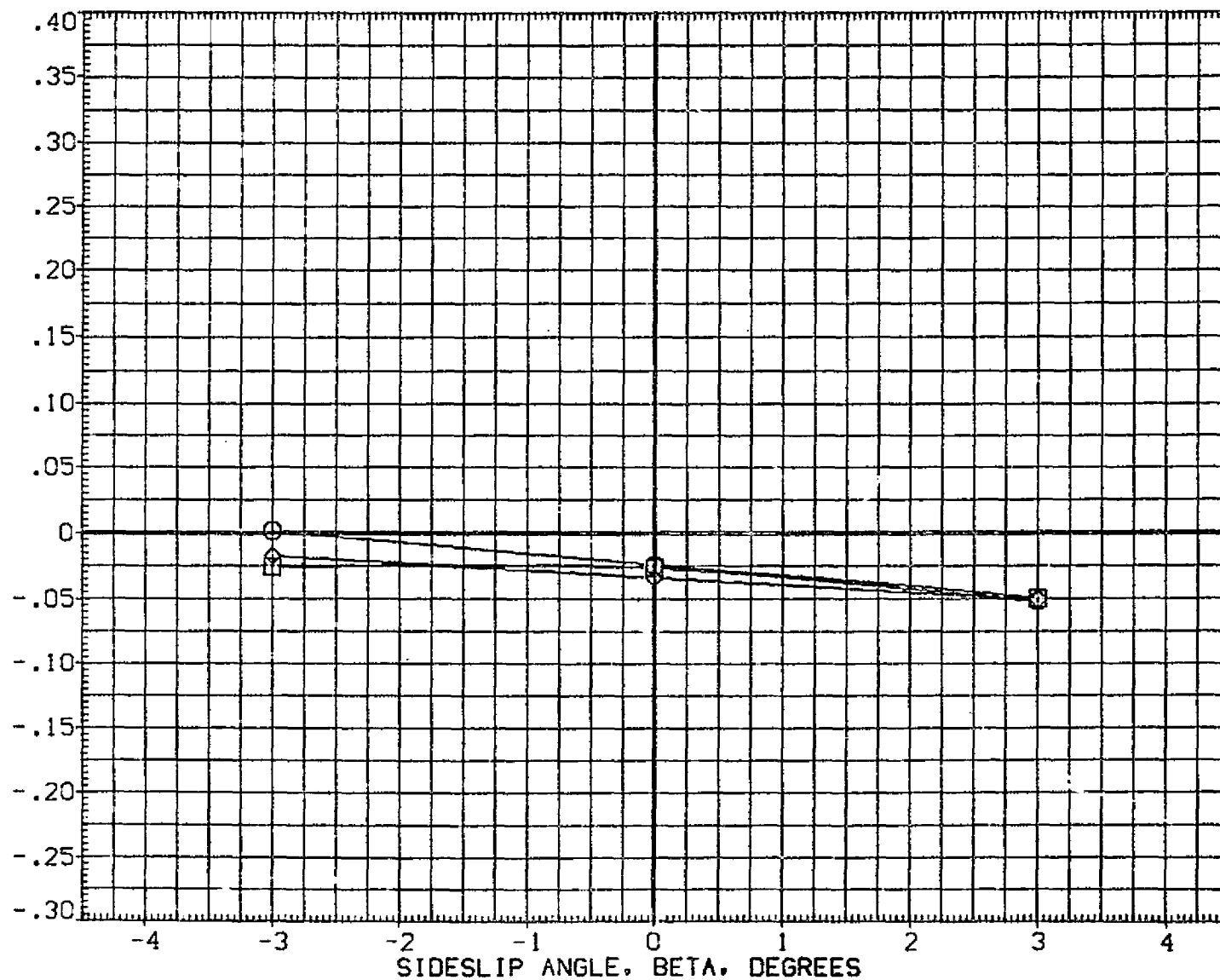


FIGURE 91. AMPLIFICATION FACTOR IN YAW, N50N85 JETS

SYMBOL	T/QA-1	PARAMETRIC VALUES			
○	47.500	MACH	10.330	ALPHA	35.000
□	95.000	BDFLAP	.000	T/QA	95.000
◇	127.700	NOJET	2.000	ELEVON	.000

REFERENCE INFORMATION		
SREF	2650.0000	SQ. FT.
LREF	474.0000	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - SIDE FORCE, N(SF)

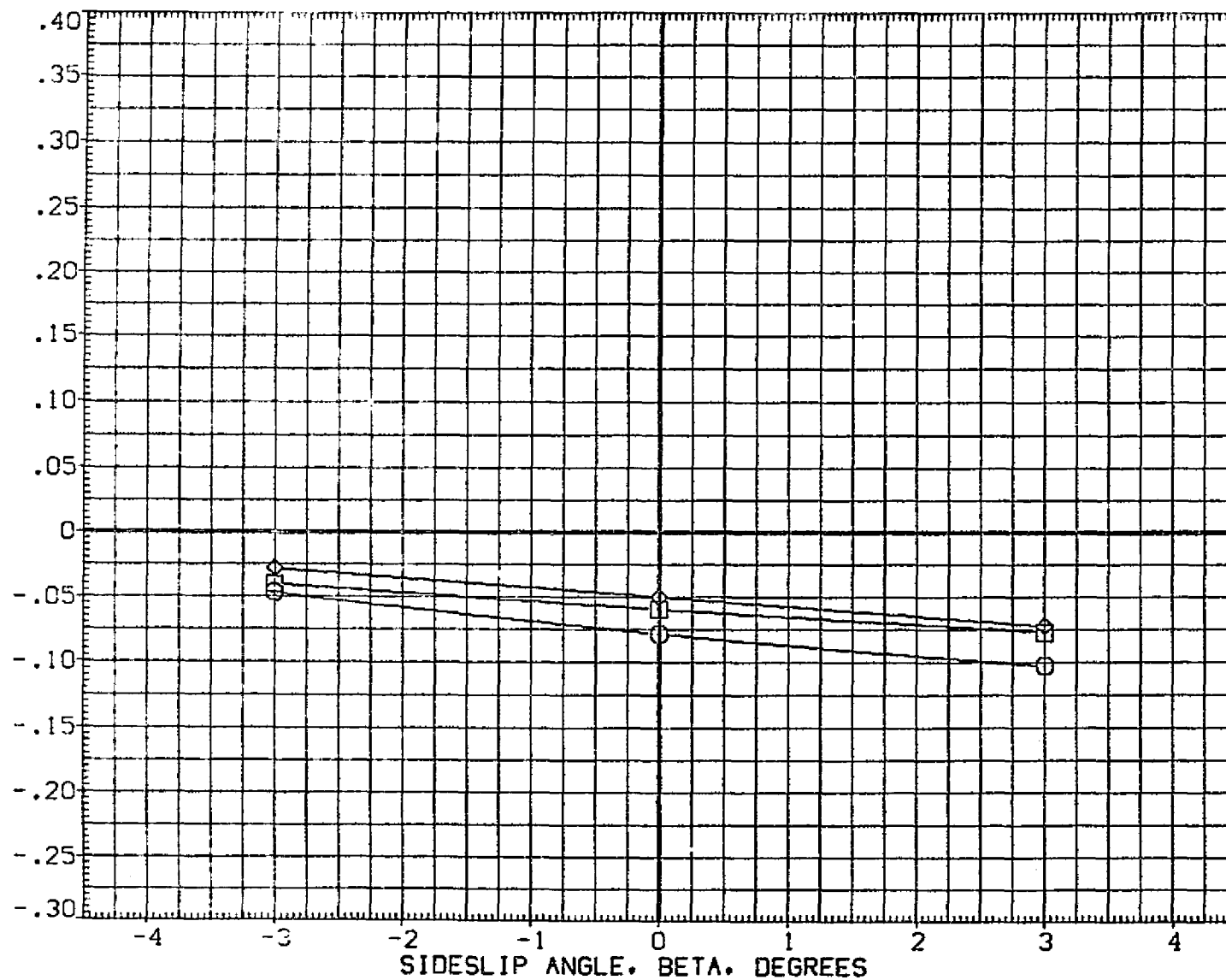


FIGURE 91. AMPLIFICATION FACTOR IN YAW, N50N85 JETS

01N84

LARC CFHT 118 (MA-22)

(FJAC94)

SYMBOL	T/QA-I	MACH	PARAMETRIC VALUES	ALPHA	-10.000
○	47.500	BDFLAP	.000	T/QA	95.000
□	95.000	NO JET	2.000	ELEVON	.000
◇	127.700				

REFERENCE INFORMATION

SREF	2690.0000	SQ. FT.
LREF	474.8000	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - PITCH, N(PM)

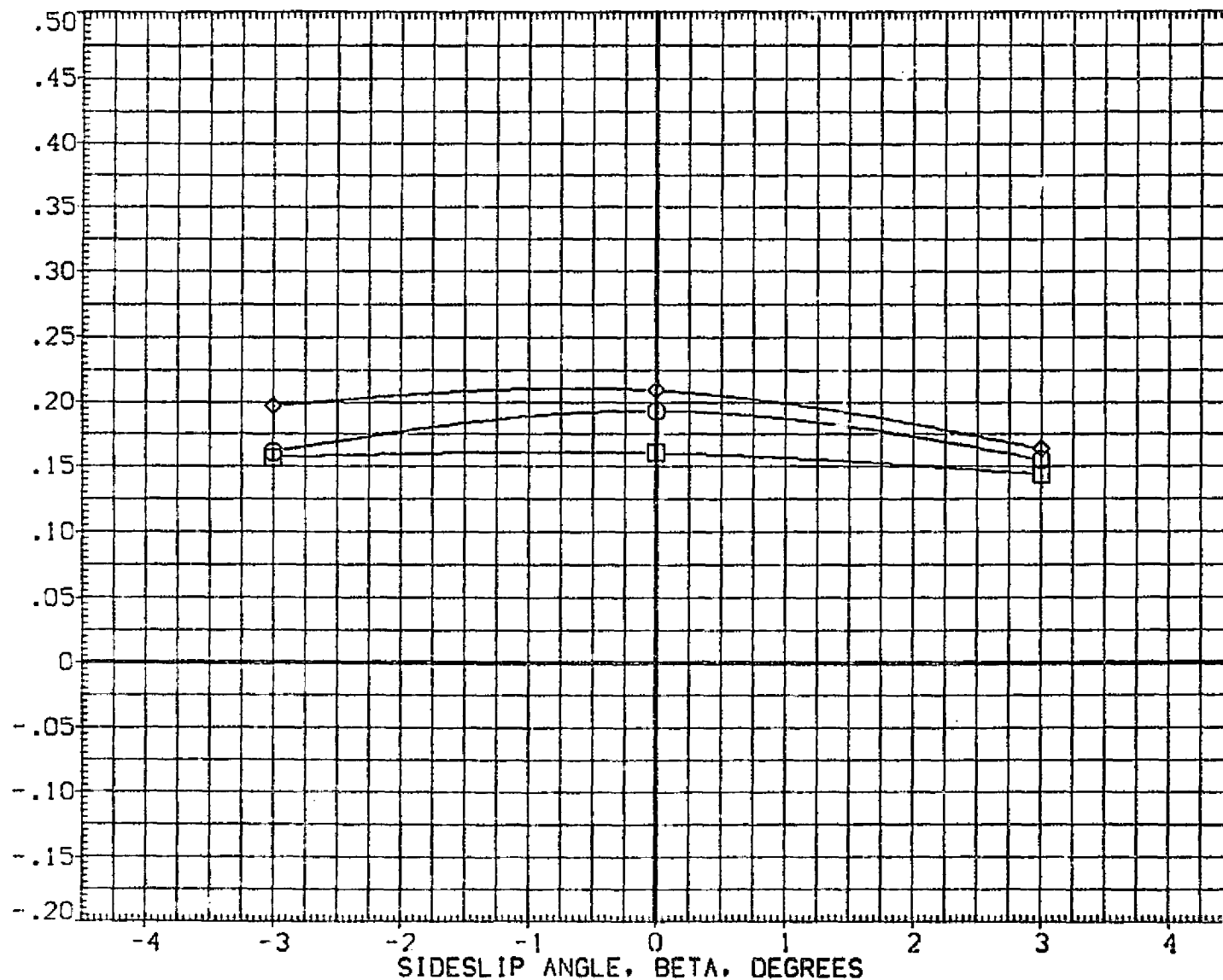


FIGURE 92. AMPLIFICATION FACTOR IN YAW, N84 JETS

SYMBOL	T/QA-1	MACH	PARAMETRIC VALUES	ALPHA	T/QA	ELEVON
○	47.500	10.330	.000	.000	.000	.000
□	95.000	BDFLAP	.000	.000	.95.000	.000
◇	127.700	NOJET	2.000	.000	.000	.000

REFERENCE INFORMATION		
SREF	2650.0000	90. FT.
LREF	474.8000	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. XC
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - PITCH, NCPM)

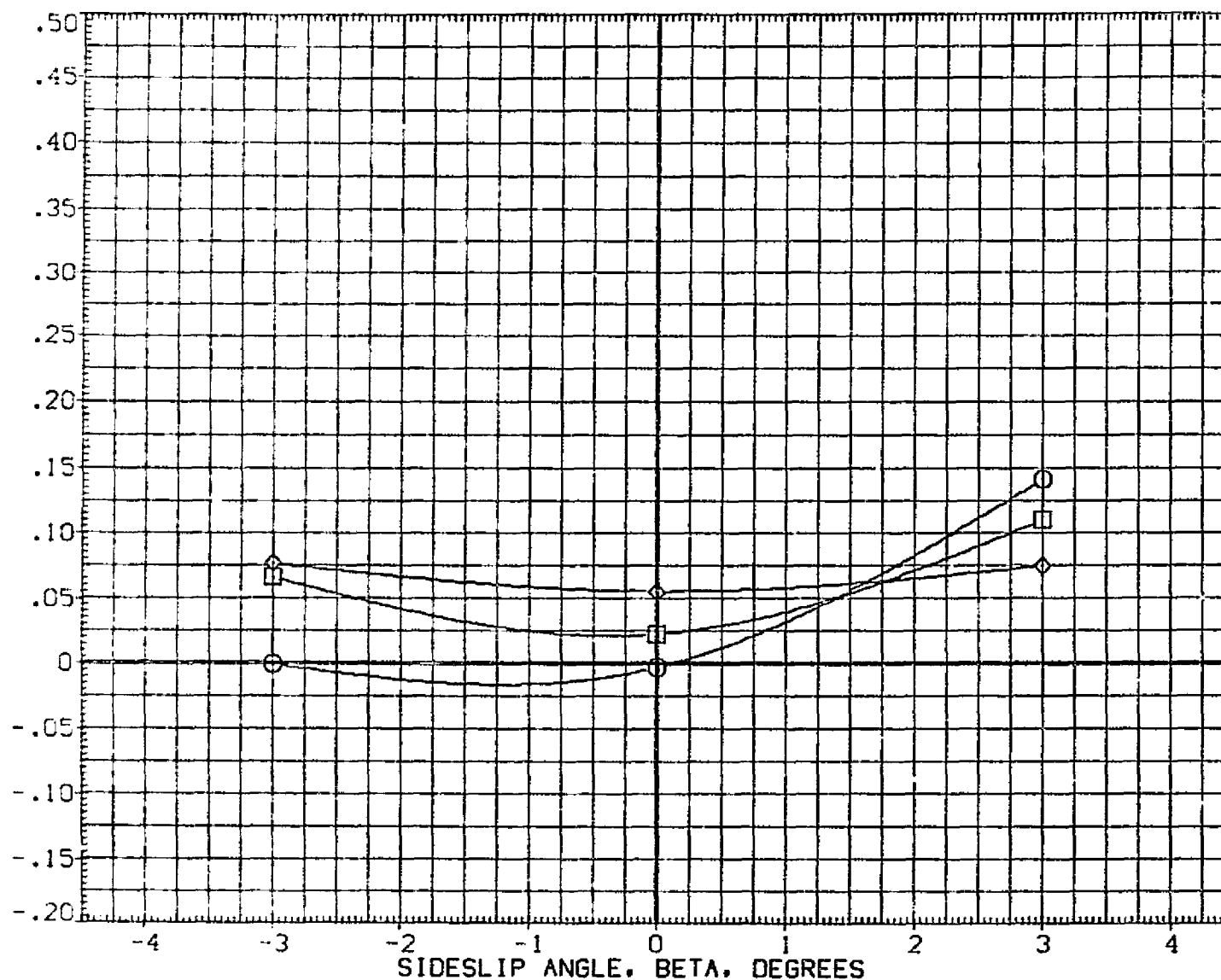


FIGURE 92. AMPLIFICATION FACTOR IN YAW, N84 JETS

01N84

LARC CFHT 118 (MA-22)

(FJA094)

SYMBOL

T/QA-1

PARAMETRIC VALUES

○

47.500

MACH

10.330

ALPHA

10.000

□

95.000

BDFLAP

.000

T/QA

95.000

◇

127.700

NGJET

2.000

ELEVON

.000

REFERENCE INFORMATION

SREF

2690.0000

SQ.FT.

LREF

474.8000

INCHES

BREF

936.6800

INCHES

XMRP

1076.7000

IN. X0

YMRP

.0000

IN. Y0

ZMRP

375.0000

IN. Z0

SCALE

.0100

RCS JET AMPLIFICATION FACTOR - PITCH, N(PM)

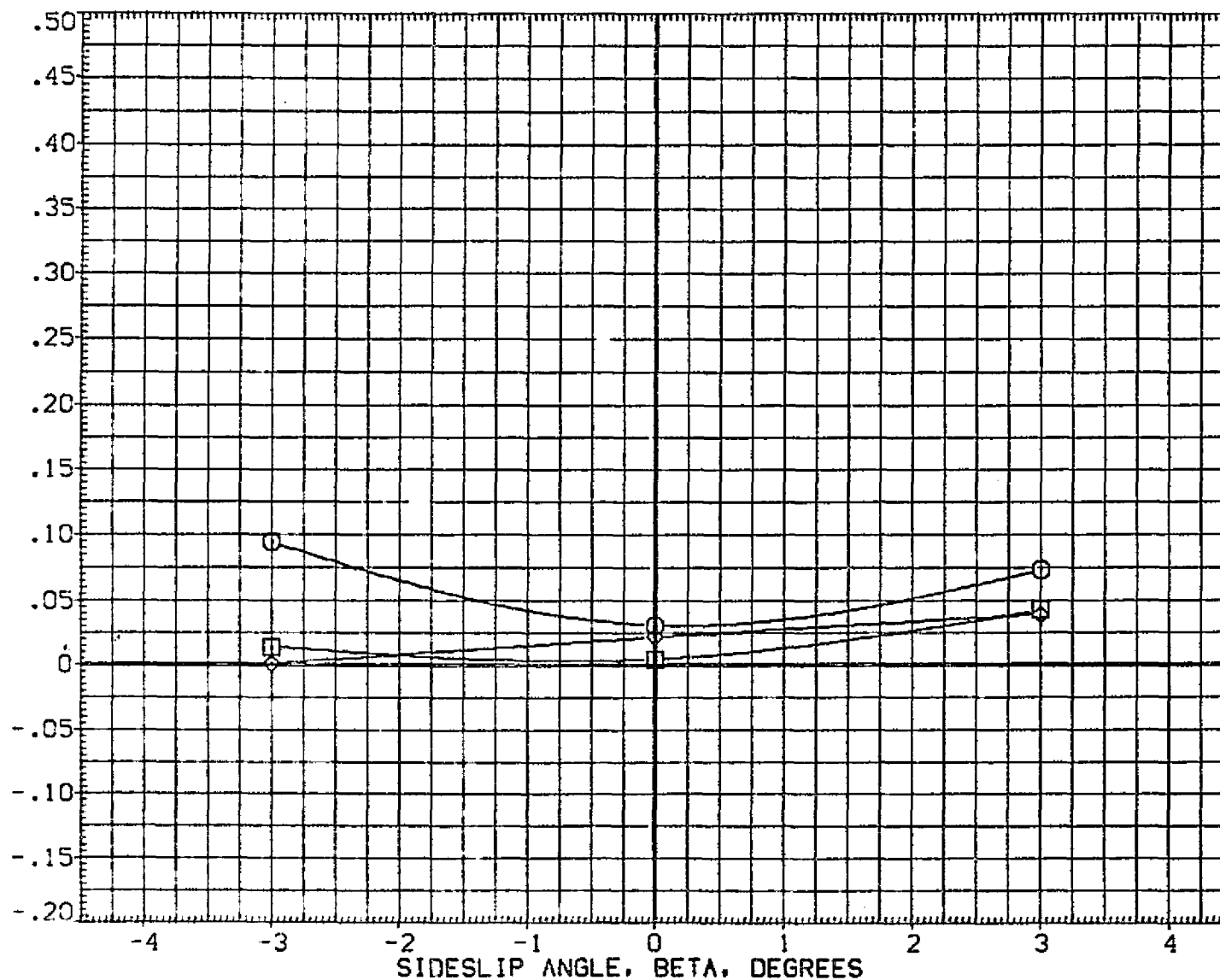


FIGURE 92. AMPLIFICATION FACTOR IN YAW, N84 JETS

SYMBOL

T/OA-1

MACH

PARAMETRIC VALUES

10.330

ALPHA

20.000

○

47.500

BDFLAP

.000

T/OA

95.000

□

95.000

NOJET

2.000

ELEVON

.000

◇

127.700

REFERENCE INFORMATION

SREF

2690.0000

SQ.FT.

LREF

474.8000

INCHES

BREF

936.6800

INCHES

XMRP

1076.7000

IN. X0

YMRP

.0000

IN. Y0

ZMRP

375.0000

IN. Z0

SCALE

.0100

RCS JET AMPLIFICATION FACTOR - PITCH, N(PM)

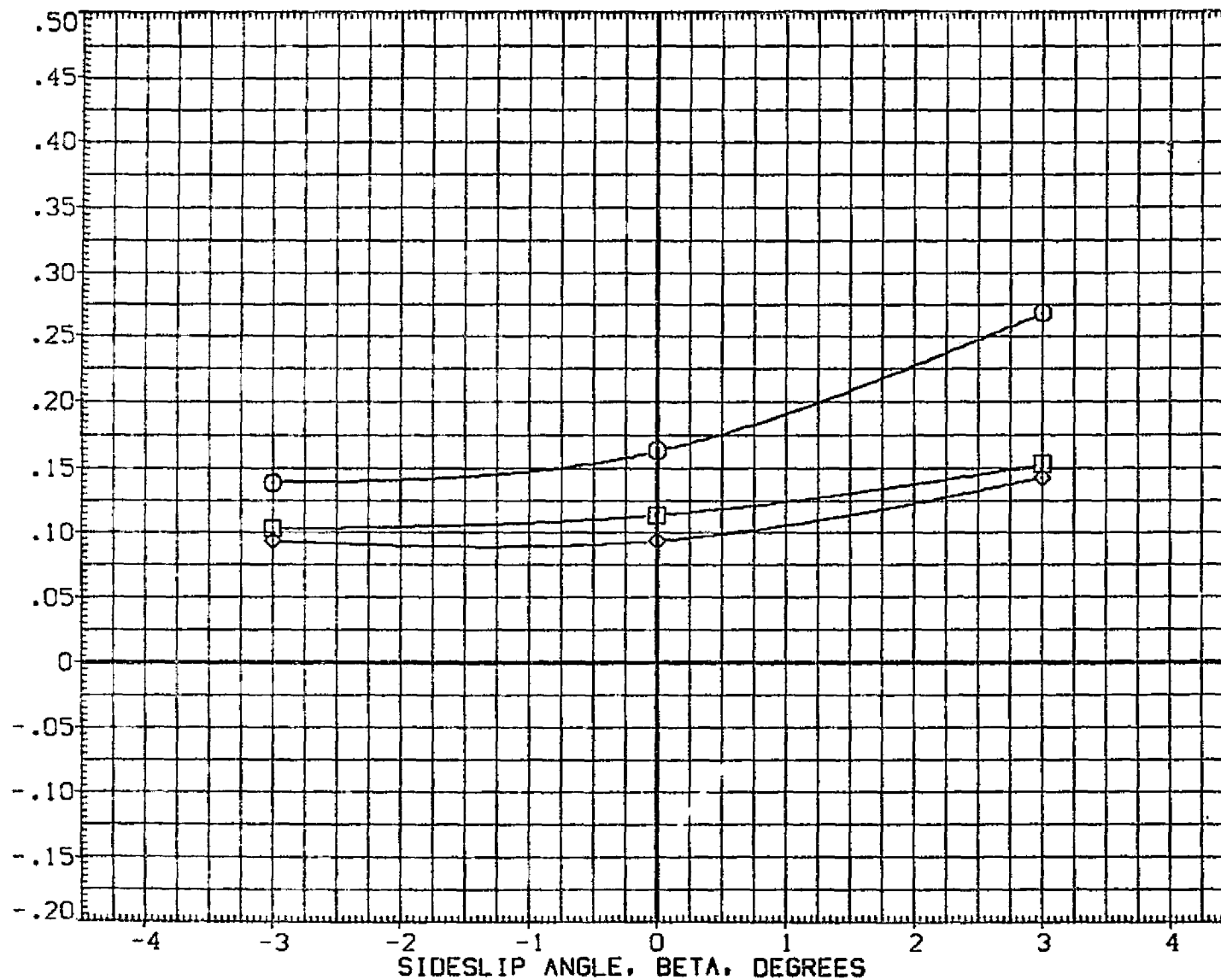


FIGURE 92. AMPLIFICATION FACTOR IN YAW, N84 JETS

01N84

I ARC CFHT 118 (MA-22)

(FJA094)

SYMBOL

T/QA-1

PARAMETRIC VALUES

REFERENCE INFORMATION

○
□
◇

47.500
95.000
127.700

MACH
BDFLAP
NO. JET

10.330
.000
2.000

ALPHA
T/QA
ELEVON

35.000
95.000
.000

SREF 2690.0000
LREF 474.6000
BREF 936.6800
XMRP 1076.7000
YMRP .0000
ZMRP 375.0000
SCALE .0100

50. FT.
INCHES
IN. X0
IN. Y0
IN. Z0

RCS JET AMPLIFICATION FACTOR - PITCH, N(PM)

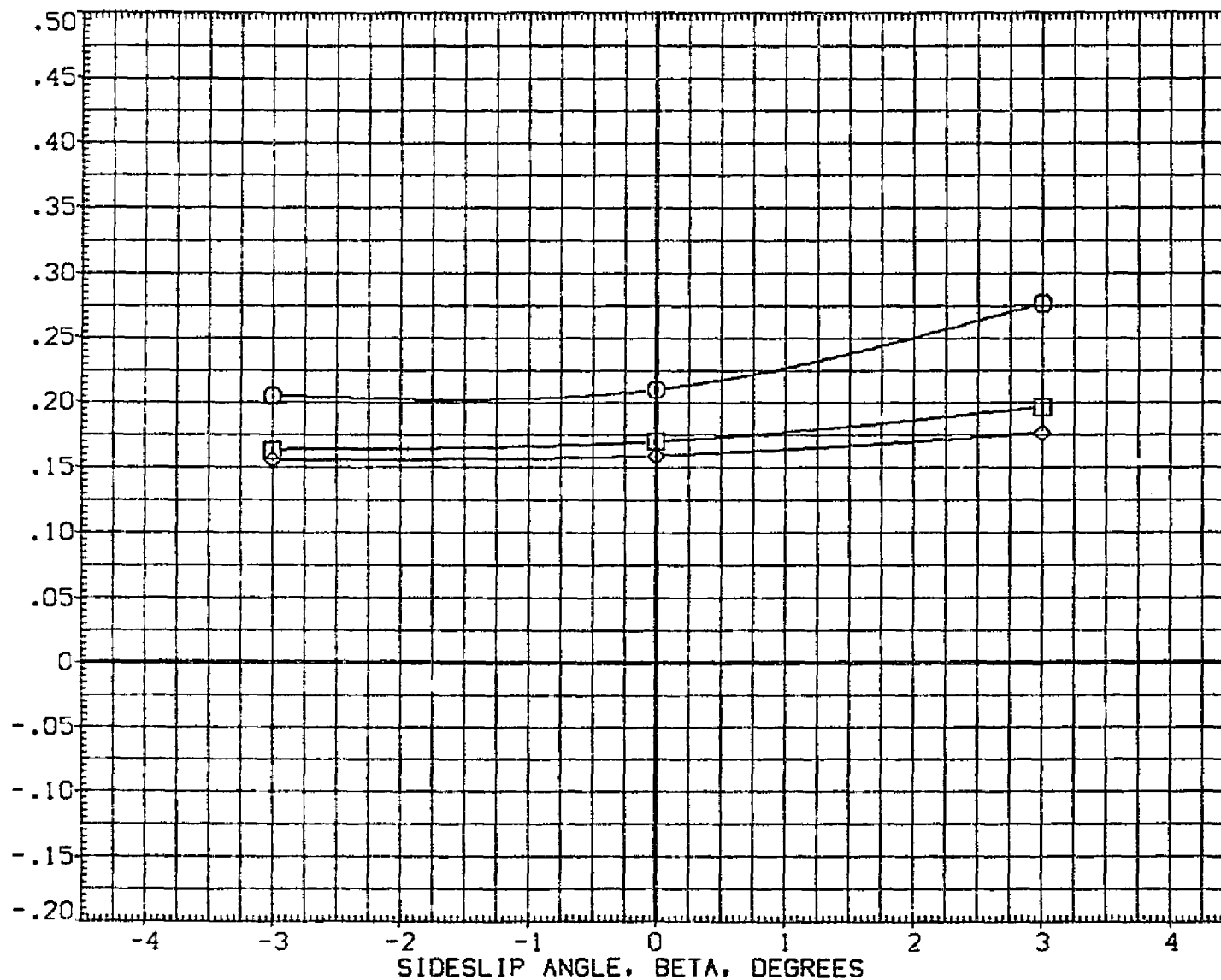


FIGURE 92. AMPLIFICATION FACTOR IN YAW, N84 JETS

SYMBOL

○
□
◇

T/QA-1

47.500

95.000

127.700

MACH

80FLAP

NO JET

PARAMETRIC VALUES

10.330

.000

2.000

ALPHA

T/QA

ELEVON

-10.000

95.000

.000

REFERENCE INFORMATION

SREF 2690.0000

LREF 474.8000

BREF 936.6800

XMRP 1076.7000

YMRP .0000

ZMRP 375.0000

SCALE .0100

50. FT.

INCHES

INCHES

IN. X0

IN. Y0

IN. Z0

RCS JET AMPLIFICATION FACTOR - ROLL, N(RM)

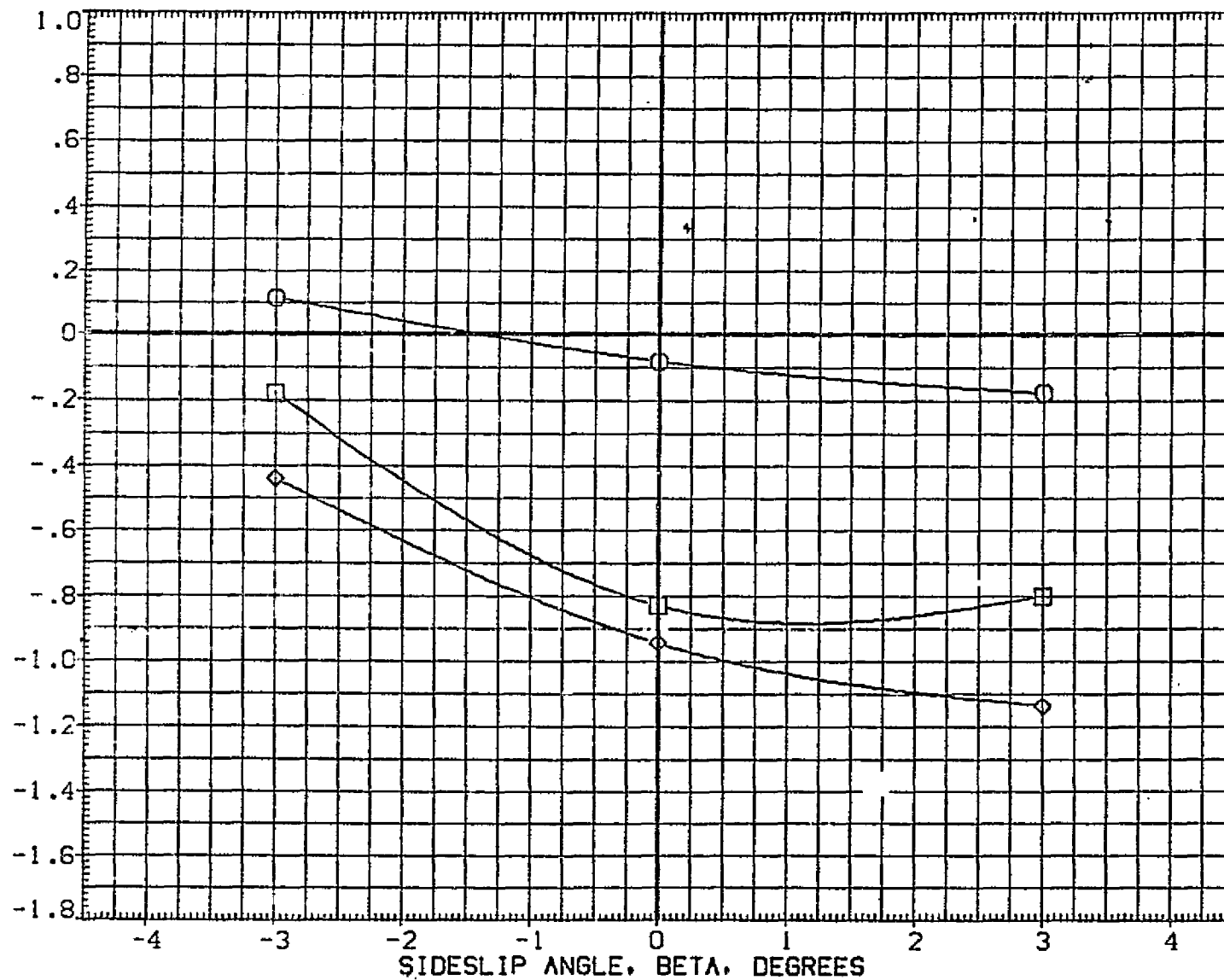


FIGURE 92. AMPLIFICATION FACTOR IN YAW, N84 JETS

01N84

LARC CFHT 118 (MA-22)

(FJA094)

SYMBOL	T/OA-1	MACH	PARAMETRIC VALUES	ALPHA	T/OA	ELEVON
○	47.500	10.330	.000	95.000	.000	
□	95.000	.000	2.000			
◇	127.700					

REFERENCE INFORMATION		
SREF	2690.0000	50. FT.
LREF	474.8000	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - ROLL, N(RM)

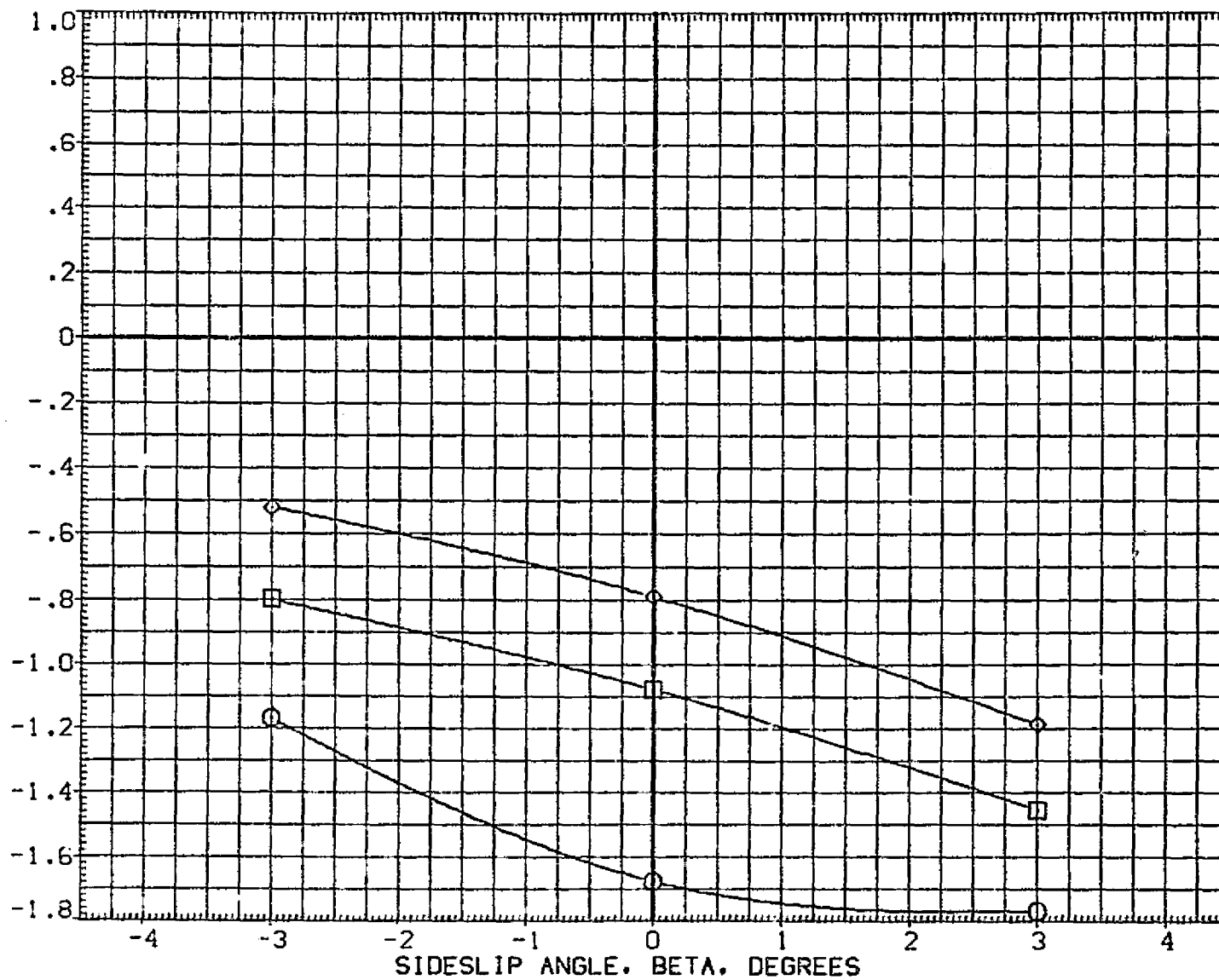


FIGURE 92. AMPLIFICATION FACTOR IN YAW, N84 JETS

SYMBOL

T/OA-1

MACH

PARAMETRIC VALUES

10.330

ALPHA

10.000

○

47.500

BOFLAP

.000

T/OA

95.000

□

95.000

NO.JET

2.000

ELEVON

.000

◇

127.700

REFERENCE INFORMATION

SREF

2690.0000

SQ.FT.

LREF

474.8000

INCHES

BREF

936.6800

INCHES

XMRP

1076.7000

IN. X0

YMRP

.0000

IN. Y0

ZMRP

375.0000

IN. Z0

SCALE

.0100

RCS JET AMPLIFICATION FACTOR - ROLL, N(RM)

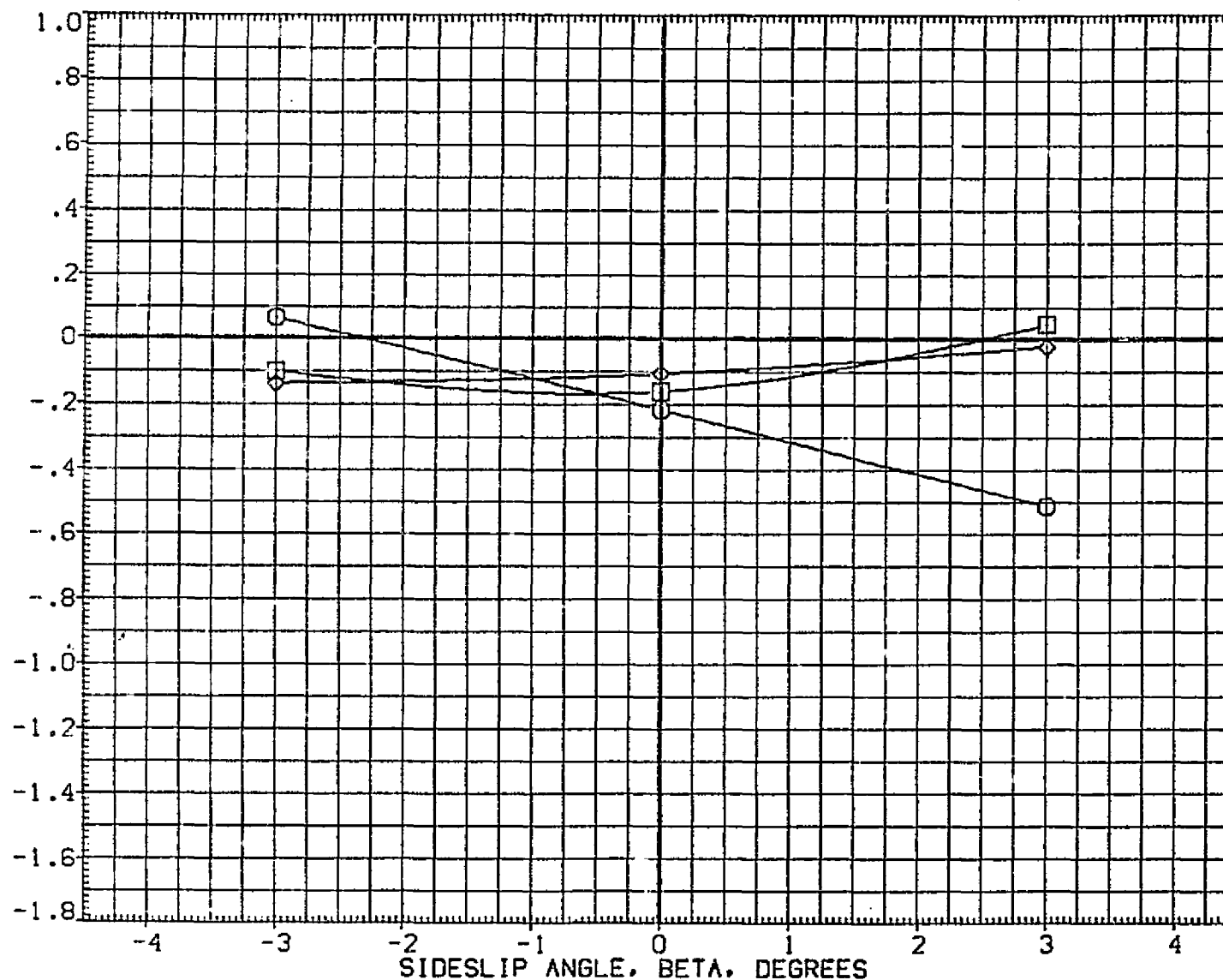


FIGURE 92. AMPLIFICATION FACTOR IN YAW, N84 JETS

01N84

LARC CFHT 118 (MA-22)

(FJA094)

SYMBOL

T/QA-1

PARAMETRIC VALUES

○
□
◇

47.500
95.000
127.700

MACH
BDFLAP
NOJET

10.330
.000
2.000

ALPHA
T/QA
ELEVON

20.000
95.000
.000

REFERENCE INFORMATION

SREF 2690.0000 SQ.FT.
LREF 474.8000 INCHES
BREF 935.6800 INCHES
XMRP 1076.7000 IN. X0
YMRP .0000 IN. Y0
ZMRP 375.0000 IN. Z0
SCALE .0100

RCS JET AMPLIFICATION FACTOR - ROLL, NCRM)

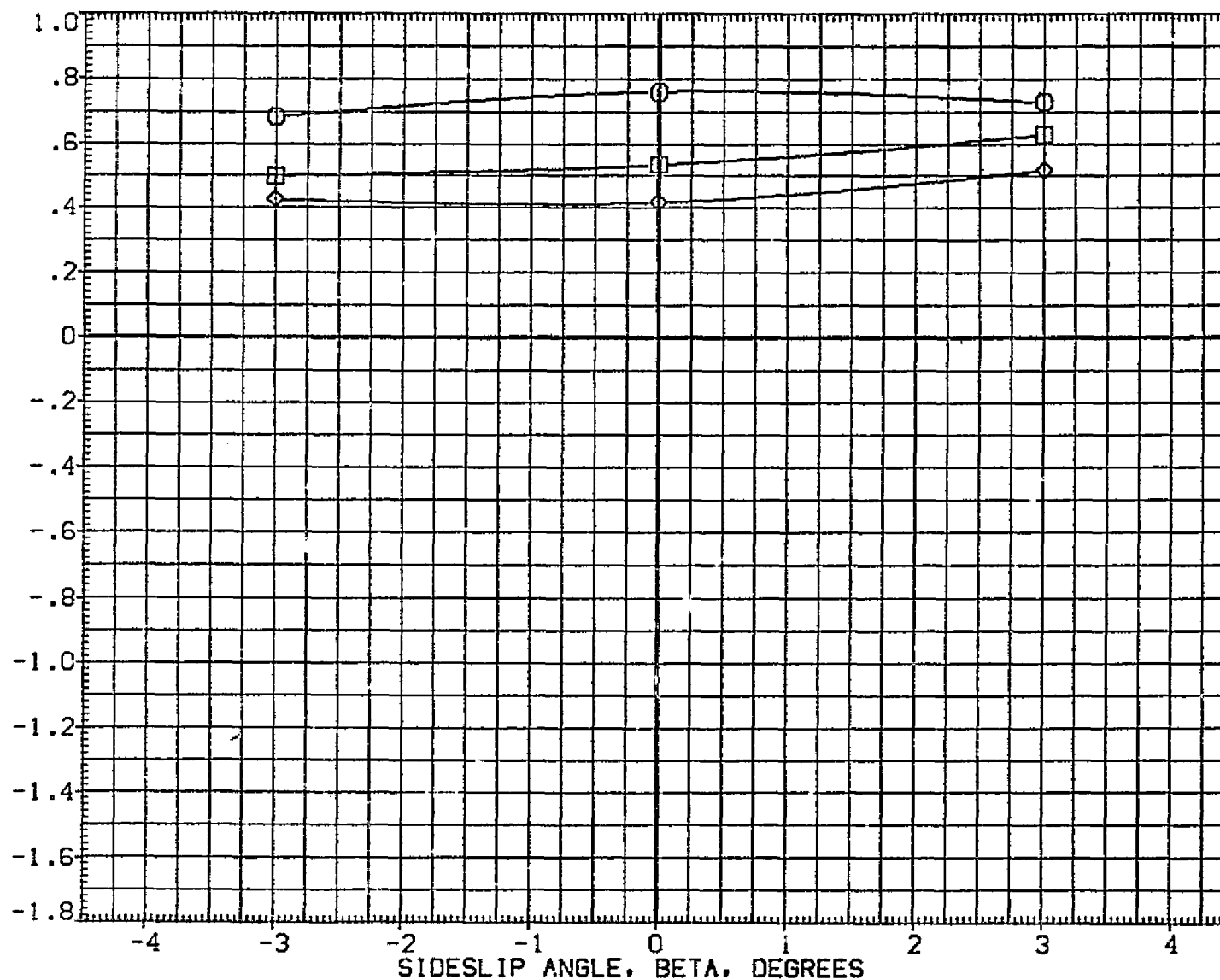


FIGURE 92. AMPLIFICATION FACTOR IN YAW, N84 JETS

SYMBOL

○
□
◇

T/QA-1

47.500

MACH

95.000

BDFLAP

127.700

NO.JET

PARAMETRIC VALUES

10.330

ALPHA

35.000

T/QA

95.000

ELEVON

.000

REFERENCE INFORMATION

SREF

2690.0000

SQ.FT.

LREF

474.8000

INCHES

BREF

936.6800

INCHES

XMRP

1076.7000

IN. X0

YMRP

.0000

IN. Y0

ZMRP

375.0000

IN. Z0

SCALE

.0100

RCS JET AMPLIFICATION FACTOR - ROLL, NCRM

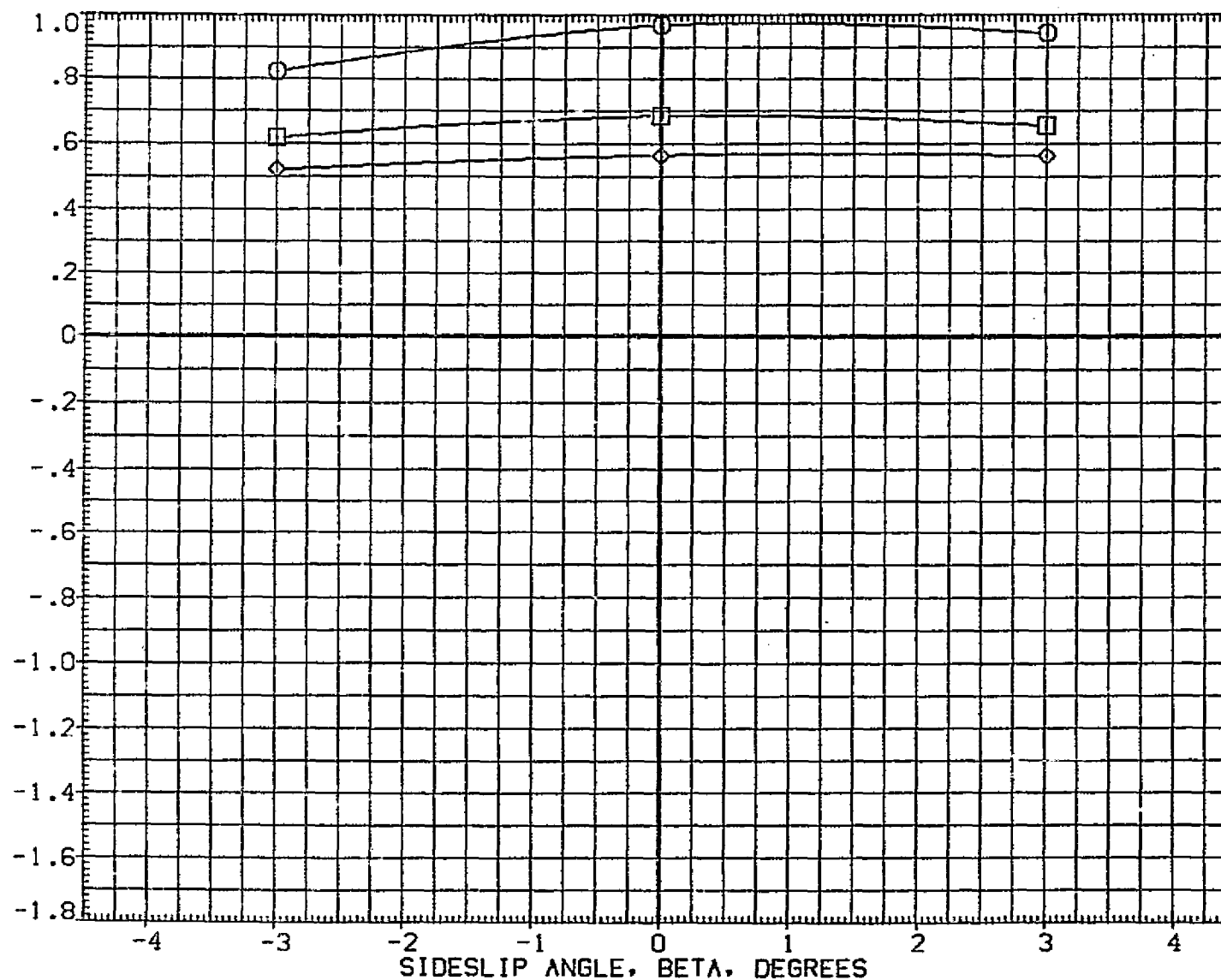


FIGURE 92. AMPLIFICATION FACTOR IN YAW, N84 JETS

01N84

LARC CFHT 118 (MA-22)

(FJA094)

SYMBOL

○
□
◇

T/QA-1

47.500

MACH

95.000

BDFLAP

NO.JET

PARAMETRIC VALUES

10.330

ALPHA

-10.000

T/QA

95.000

ELEVON

.000

REFERENCE INFORMATION

SREF 2690.0000

SQ.FT.

LREF 474.8000

INCHES

BREF 936.6800

INCHES

XMRP 1076.7000

IN. X0

YMRP .0000

IN. Y0

ZMRP 375.0000

IN. Z0

SCALE .0100

RCS JET AMPLIFICATION FACTOR - YAW, N(YM)

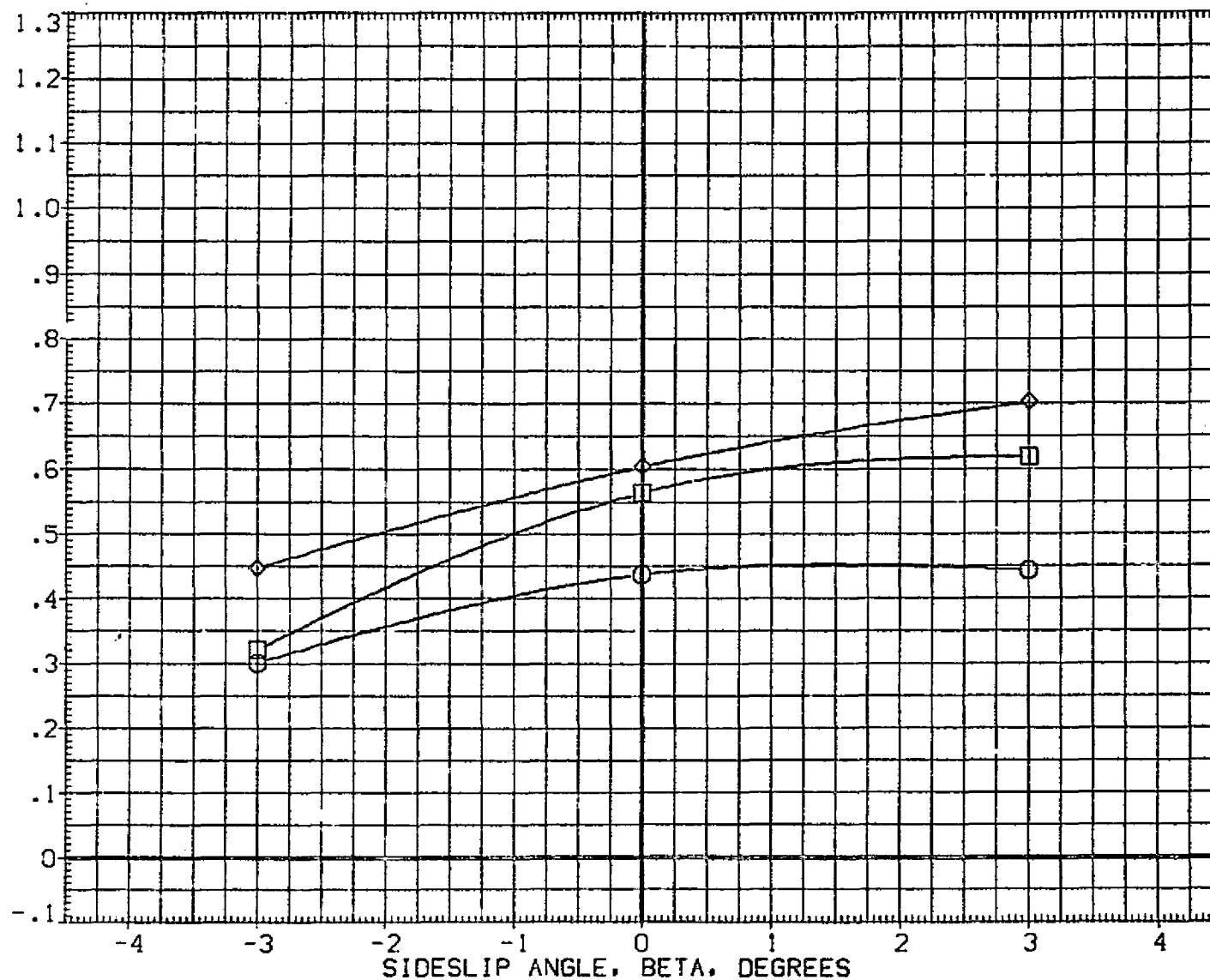


FIGURE 92. AMPLIFICATION FACTOR IN YAW, N84 JETS

01N84

LARC CFHT 118 (MA-22)

(FJA094)

SYMBOL	T/QA-1	PARAMETRIC VALUES
○	47.500	MACH 10.330 ALPHA .000
□	95.000	BDFLAP .000 T/QA 95.000
◇	127.700	N9.JET 2.000 ELEVON .000

REFERENCE INFORMATION	
SREF	2690.0000 SQ.FT.
LREF	474.8000 INCHES
BREF	936.6800 INCHES
XMRP	1076.7000 IN. X0
YMRP	.0000 IN. Y0
ZMRP	375.0000 IN. Z0
SCALE	.0100

RCS JET AMPLIFICATION FACTOR - YAW, N(YM)

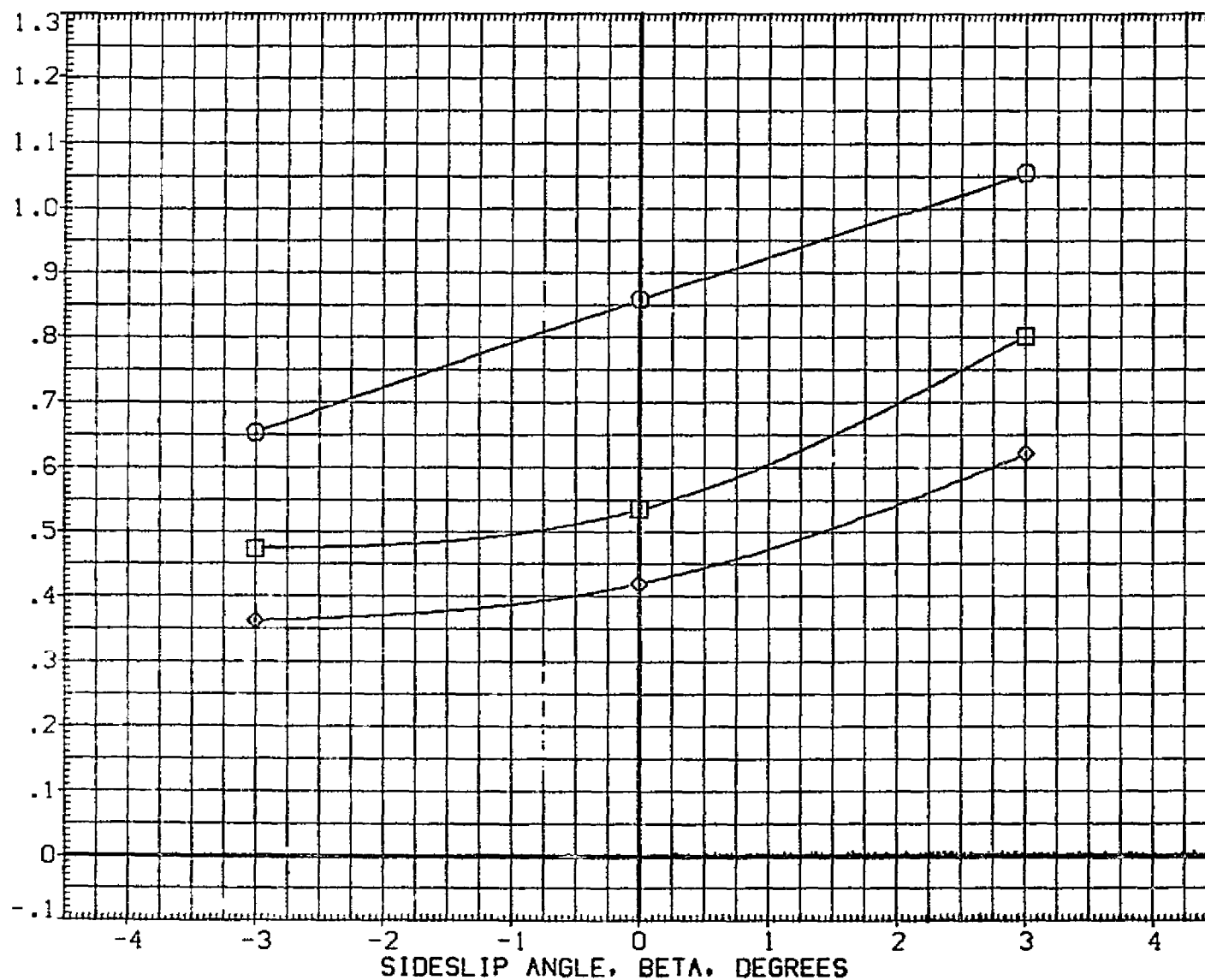


FIGURE 92. AMPLIFICATION FACTOR IN YAW, N84 JETS

01N84

LARC CFHT 118 (MA-22)

(FJA094)

SYMBOL

○
□
◇

T/OA-1

47.500

MACH

PARAMETRIC VALUES

10.330

ALPHA

10.000

BD/FLAP

.000

T/OA

95.000

NO. JET

2.000

ELEVON

.000

REFERENCE INFORMATION

SREF 2850.0000

SQ. FT.

LREF 474.8000

INCHES

BREF 936.6800

INCHES

XMRP 1076.7000

IN. X0

YMRP .0000

IN. Y0

ZMRP 375.0000

IN. Z0

SCALE .0100

RCS JET AMPLIFICATION FACTOR - YAW, N(YM)

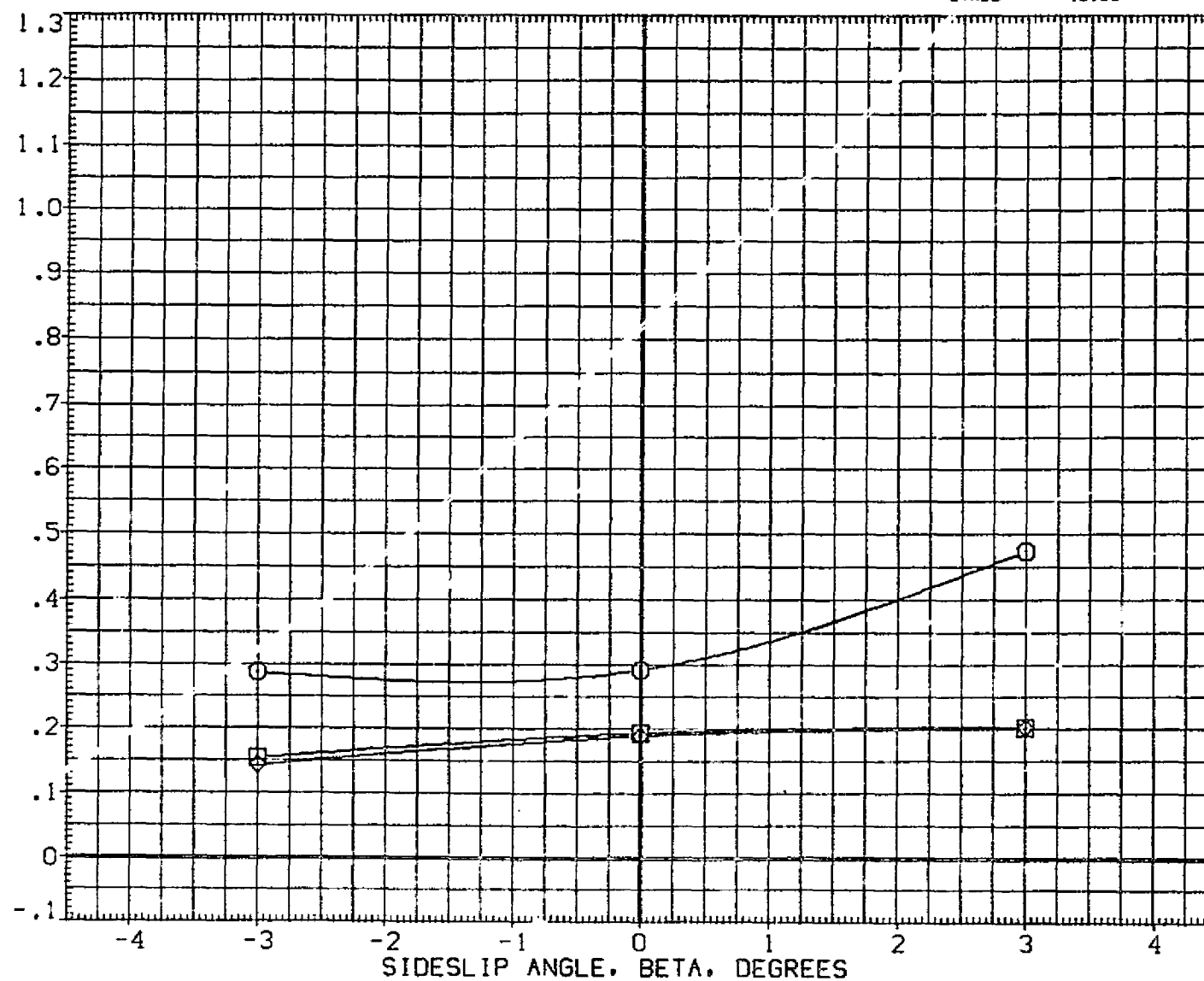


FIGURE 92. AMPLIFICATION FACTOR IN YAW, N84 JETS

SYMBOL

T/QA-1

PARAMETRIC VALUES

○
□
◇47.500
95.000
127.700MACH
BDFLAP
NOJET10.330
.000
2.000ALPHA
T/QA
ELEVON20.000
95.000
.000

REFERENCE INFORMATION

SREF	2690.0000	90. FT.
LREF	474.8000	INCHES
BREF	936.6800	INCHES
XHRP	1076.7000	IN. X0
YHRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - YAW, N(YM)

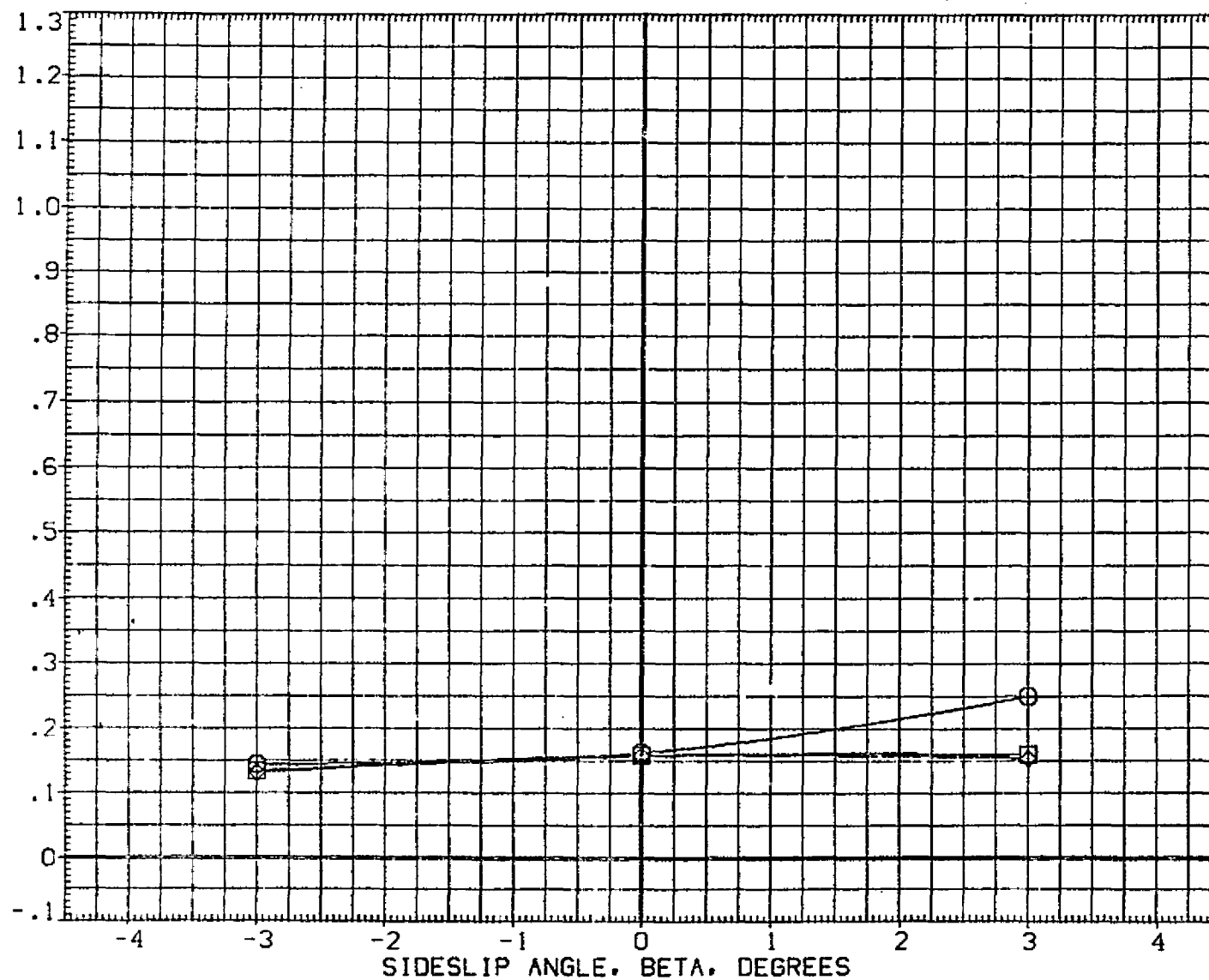


FIGURE 92. AMPLIFICATION FACTOR IN YAW, N84 JETS

01N84

LARC CFHT 118 (MA-22)

(FJA094)

SYMBOL	T/QA-1	PARAMETRIC VALUES
○	47.500	MACH 10.330 ALPHA 35.000
□	95.000	BDPLAP .000 T/QA 95.000
◇	127.700	NOJET 2.000 ELEVON .000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8000	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - YAW, N(YM)

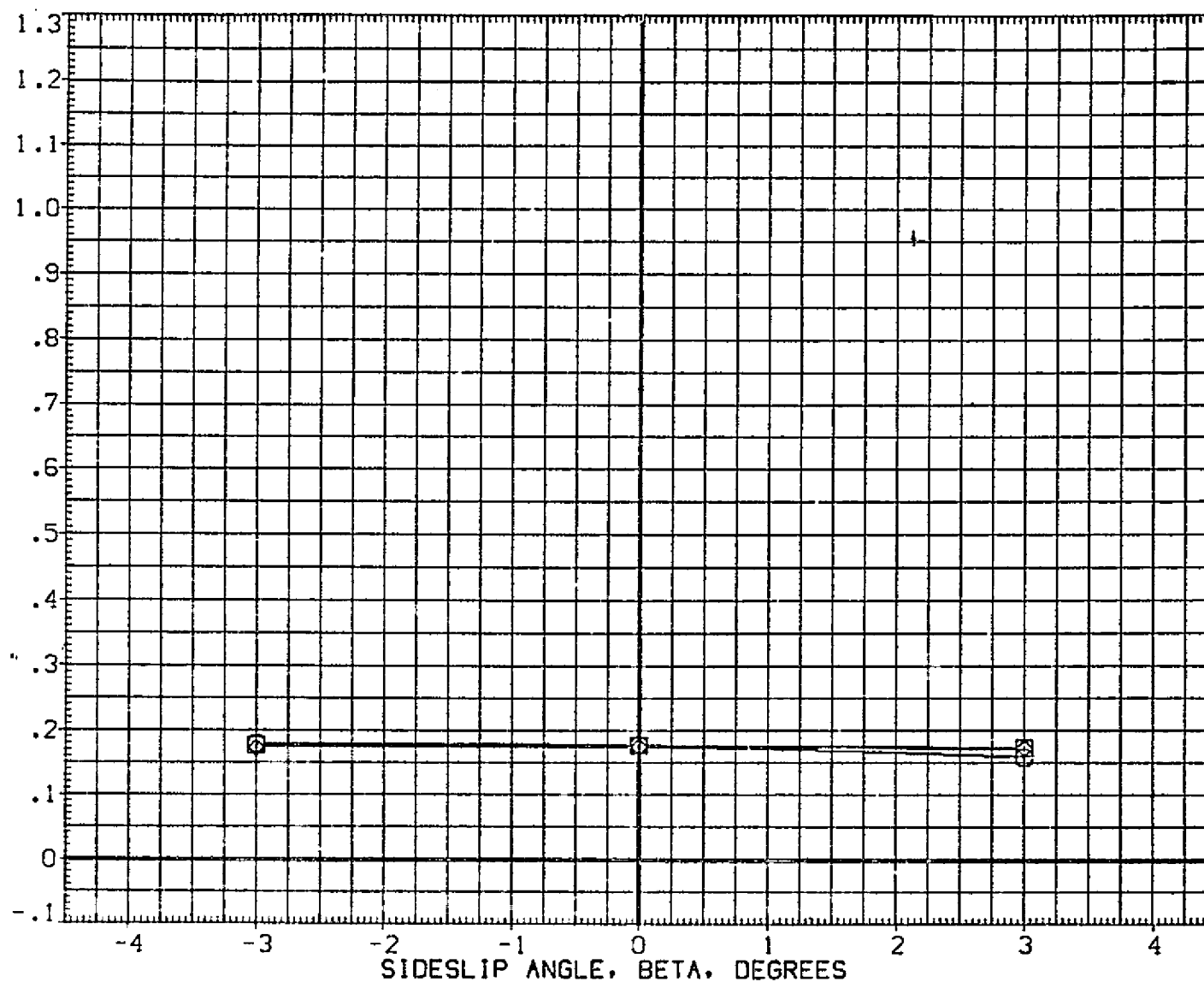


FIGURE 92. AMPLIFICATION FACTOR IN YAW, N84 JETS

SYMBOL	T/QA-1	PARAMETRIC VALUES			
○	47.500	MACH	10.330	ALPHA	-10.000
□	95.000	BDFLAP	.000	T/QA	95.000
◇	127.700	NOJET	2.000	ELEVON	.000

REFERENCE INFORMATION	
SREF	2690.0000 SQ. FT.
LREF	474.8000 INCHES
BREF	936.6800 INCHES
XMRP	1076.7000 IN. X0
YMRP	.0000 IN. Y0
ZMRP	375.0000 IN. Z0
SCALE	.0100

RCS JET AMPLIFICATION FACTOR - NORMAL FORCE, N(NF)

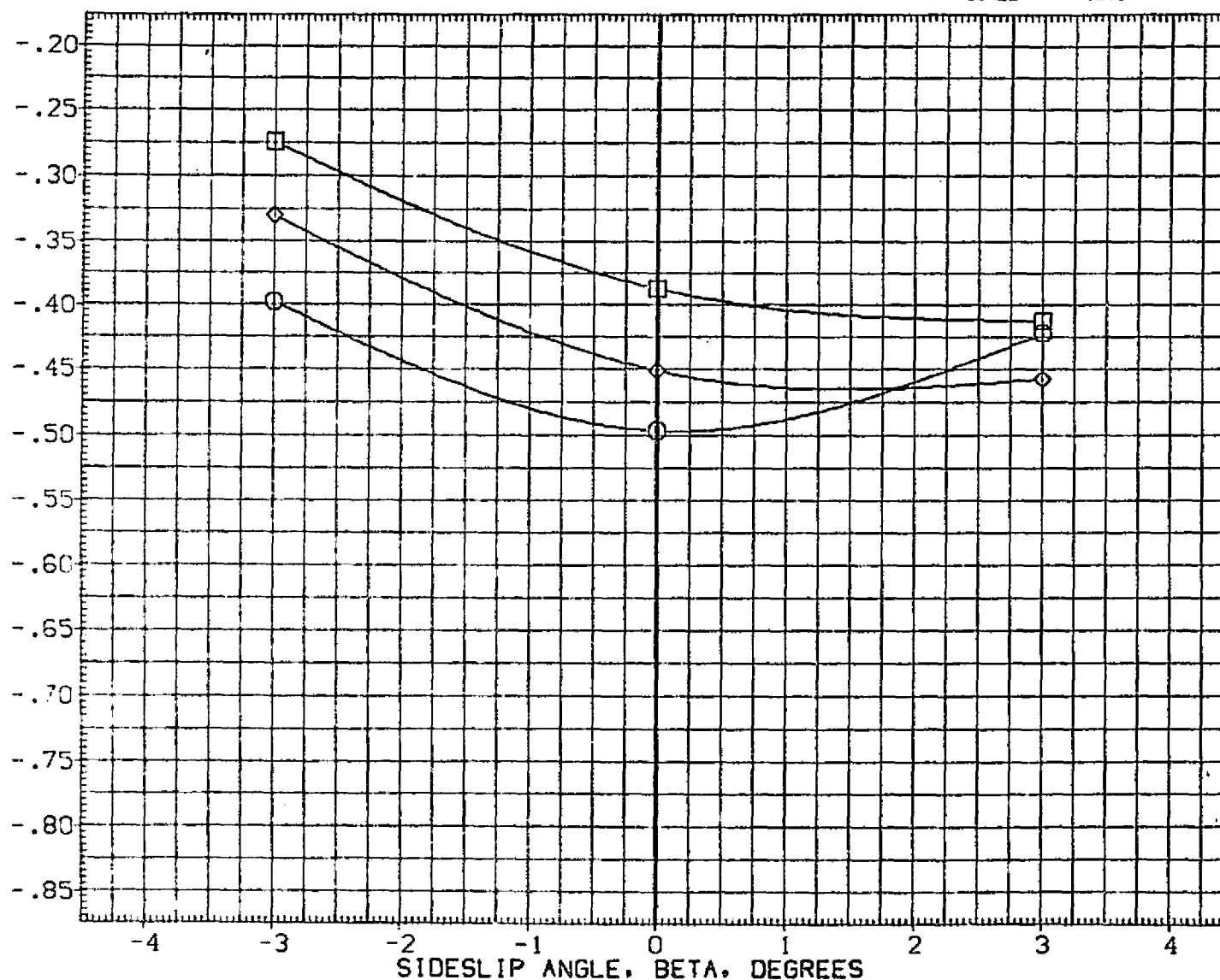


FIGURE 92. AMPLIFICATION FACTOR IN YAW, N84 JETS

01N84

LARC CFHT 118 (MA-22)

(FJA094)

SYMBOL	T/OA-1	PARAMETRIC VALUES
○	47.500	MACH 10.330 ALPHA .000
□	95.000	BDPLAP .000 T/OA 95.000
◇	127.700	NO.JET 2.000 ELEVON .000

REFERENCE INFORMATION	
SREF	2690.0000 SQ.FT.
LREF	474.8000 INCHES
BREF	936.6800 INCHES
XMRP	1076.7000 IN. X0
YMRP	.0000 IN. Y0
ZMRP	375.0000 IN. Z0
SCALE	.0100

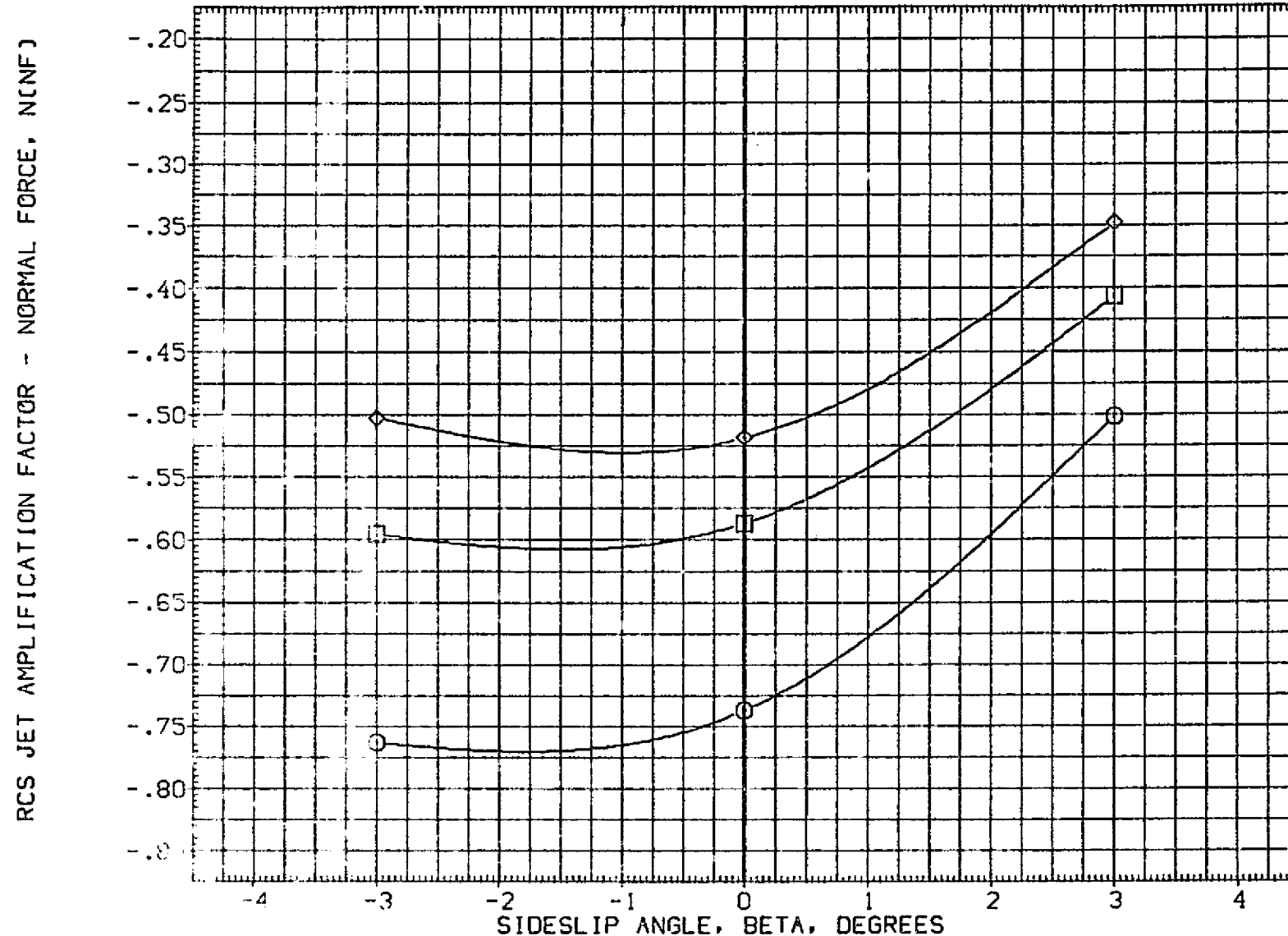


FIGURE 92. AMPLIFICATION FACTOR IN YAW, N84 JETS

SYMBOL	T/OA-1	MACH	PARAMETRIC VALUES	ALPHA	T/OA
○	47.500	10.330	10.000	10.000	95.000
□	95.000	.000	2.000	10.000	95.000
◇	127.700	NO JET	2.000	10.000	95.000

REFERENCE INFORMATION		
SREF	2690.0000	SD.FT.
LREF	474.8000	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - NORMAL FORCE, N(NF)

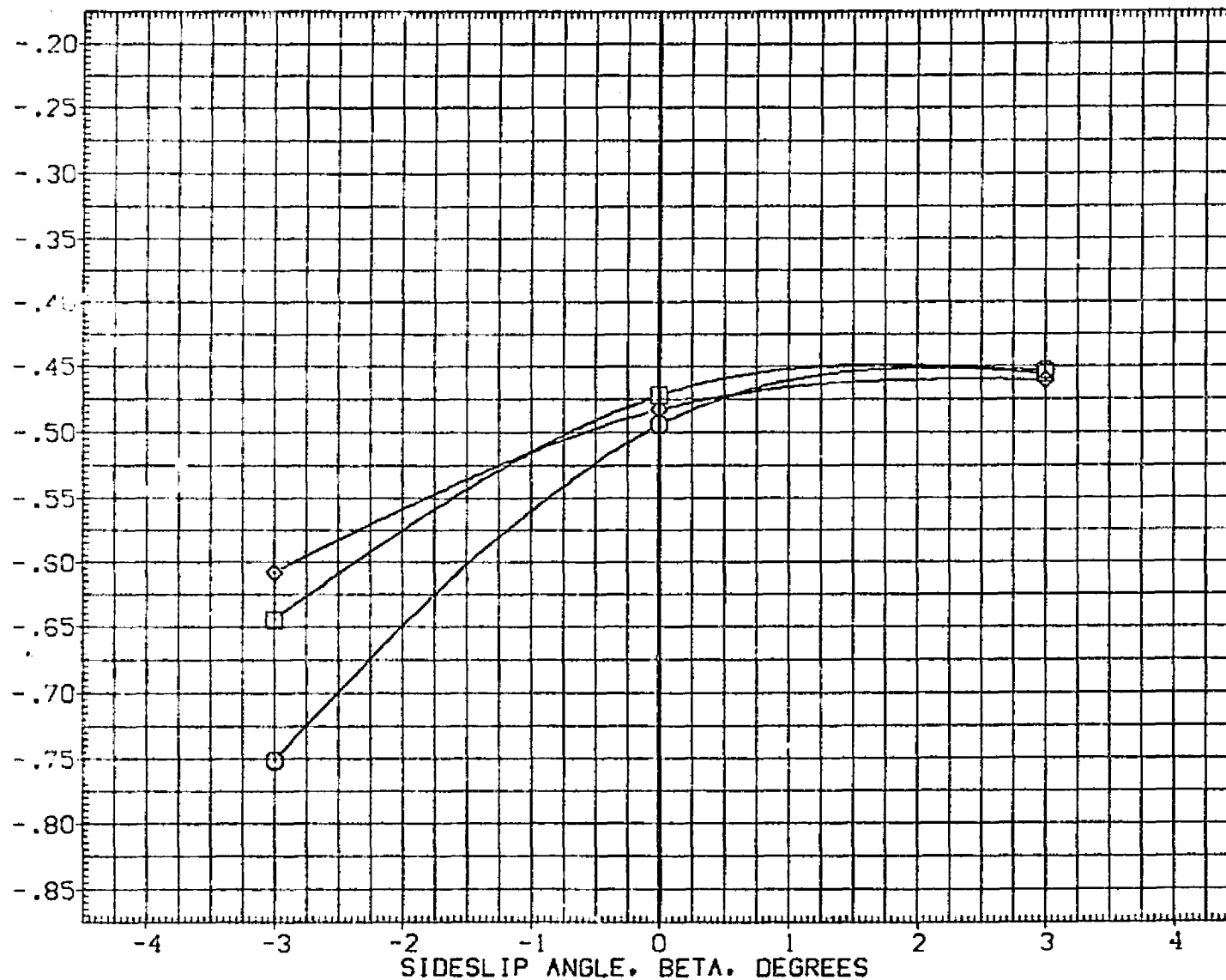


FIGURE 92. AMPLIFICATION FACTOR IN YAW, N84 JETS

01N84

LARC CFHT 118 (MA-22)

(FJA094)

SYMBOL	T/OA-1	MACH	PARAMETRIC VALUES		
○	47.500		10.330	ALPHA	20.000
□	95.000	BDFLAP	.000	T/OA	95.000
◇	127.700	NOJET	2.000	ELEVON	.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8000	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - NORMAL FORCE, N(NF)

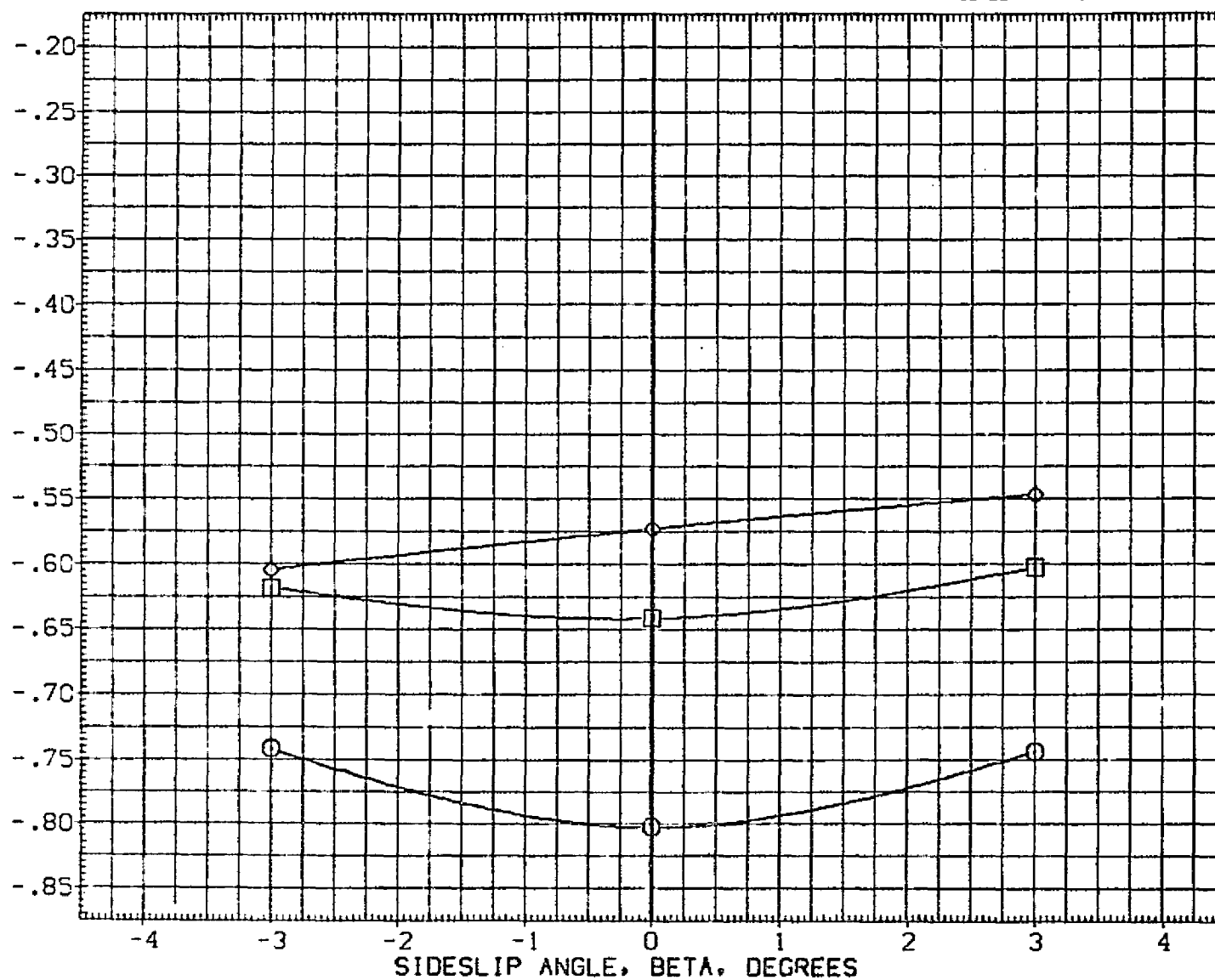


FIGURE 92. AMPLIFICATION FACTOR IN YAW, N84 JETS

SYMBOL	T/QA-1	MACH	PARAMETRIC VALUES	ALPHA	35.000
○	47.500	BDFLAP	.000	T/QA	95.000
□	95.000	NO JET	2.000	ELEVON	.000

REFERENCE INFORMATION		
SREF	2690.0000	50. FT.
LREF	474.8000	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - NORMAL FORCE, N(NF)

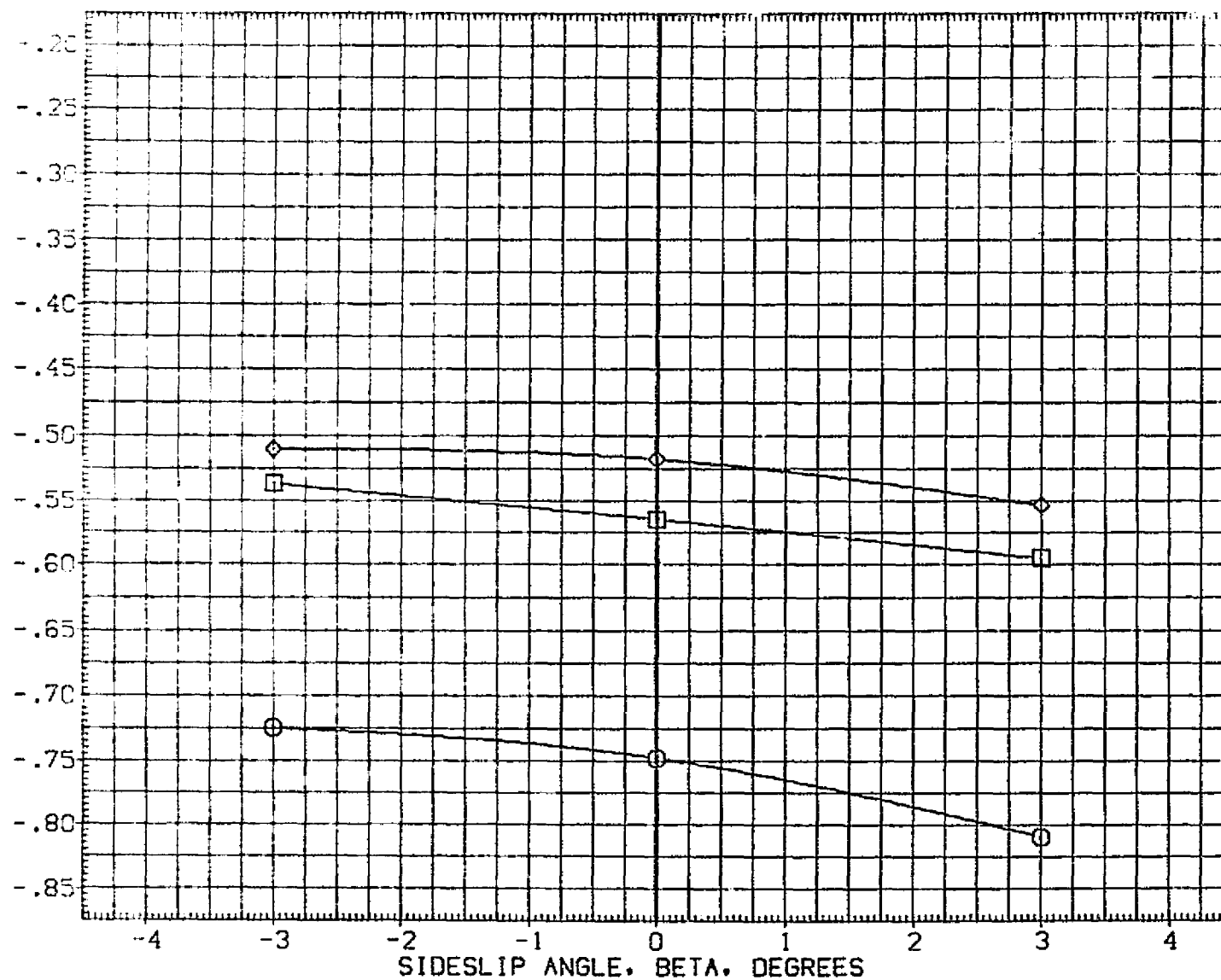


FIGURE 92. AMPLIFICATION FACTOR IN YAW, N84 JETS

01N84

LARC CFHT 118 (MA 22)

(FJA094)

SYMBOL	T/OA-1	MACH	PARAMETRIC VALUES	ALPHA	-10.000
◇	47.500	BDFLAP	.000	T/OA	95.000
□	95.000	NOJET	2.000	ELEVON	.000
○	127.700				

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8000	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - AXIAL FORCE, N(AF)

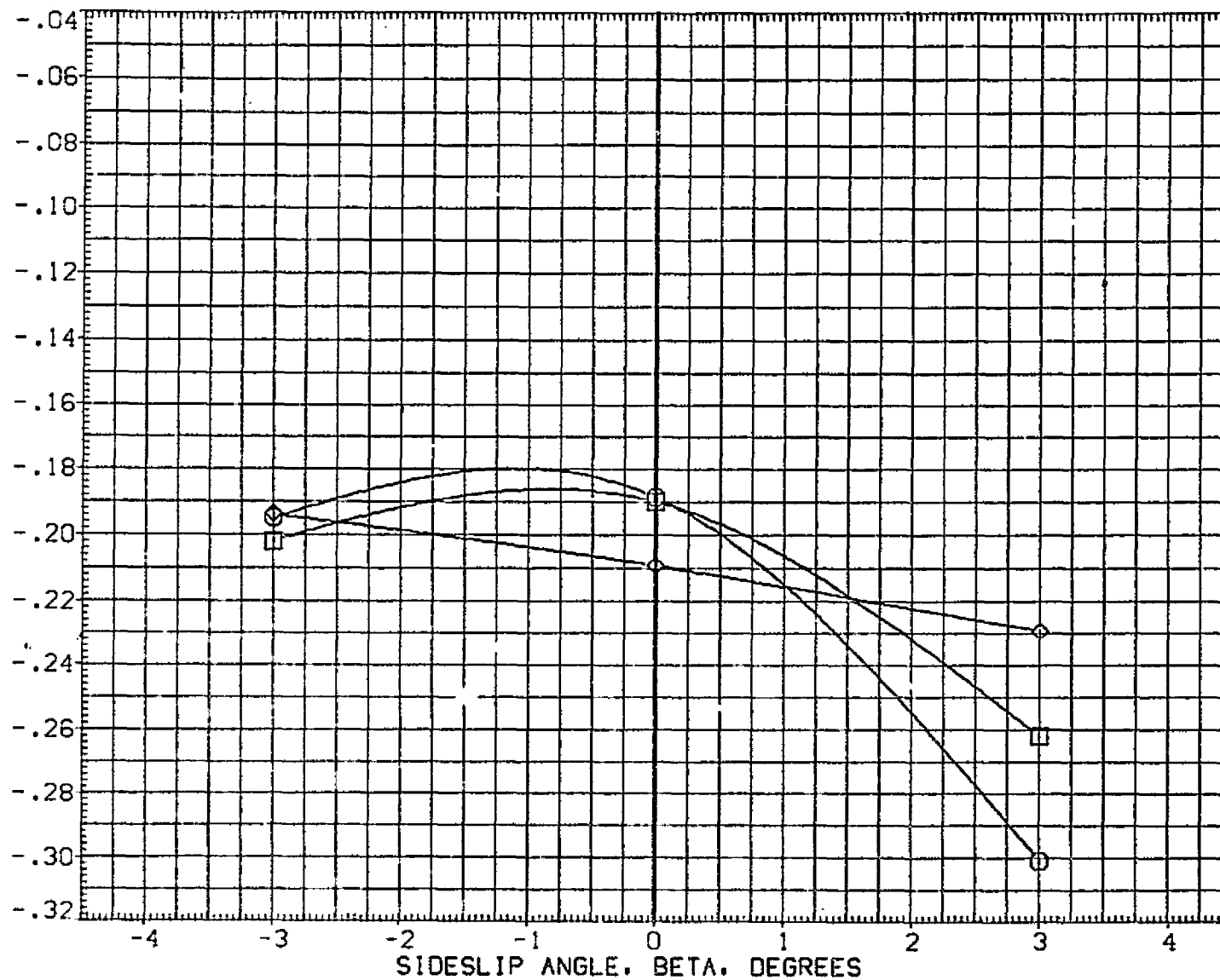


FIGURE 92. AMPLIFICATION FACTOR IN YAW, N84 JETS

SYMBOL	T/QA-1	PARAMETRIC VALUES
○	47.500	MACH 10.330 ALPHA .000
□	95.000	BDFLAP .000 T/QA 95.000
◇	127.700	N3.JET 2.000 ELEVON .000

REFERENCE INFORMATION		
SREF	2690.0000	50. FT.
LREF	474.8000	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - AXIAL FORCE, N(AF)

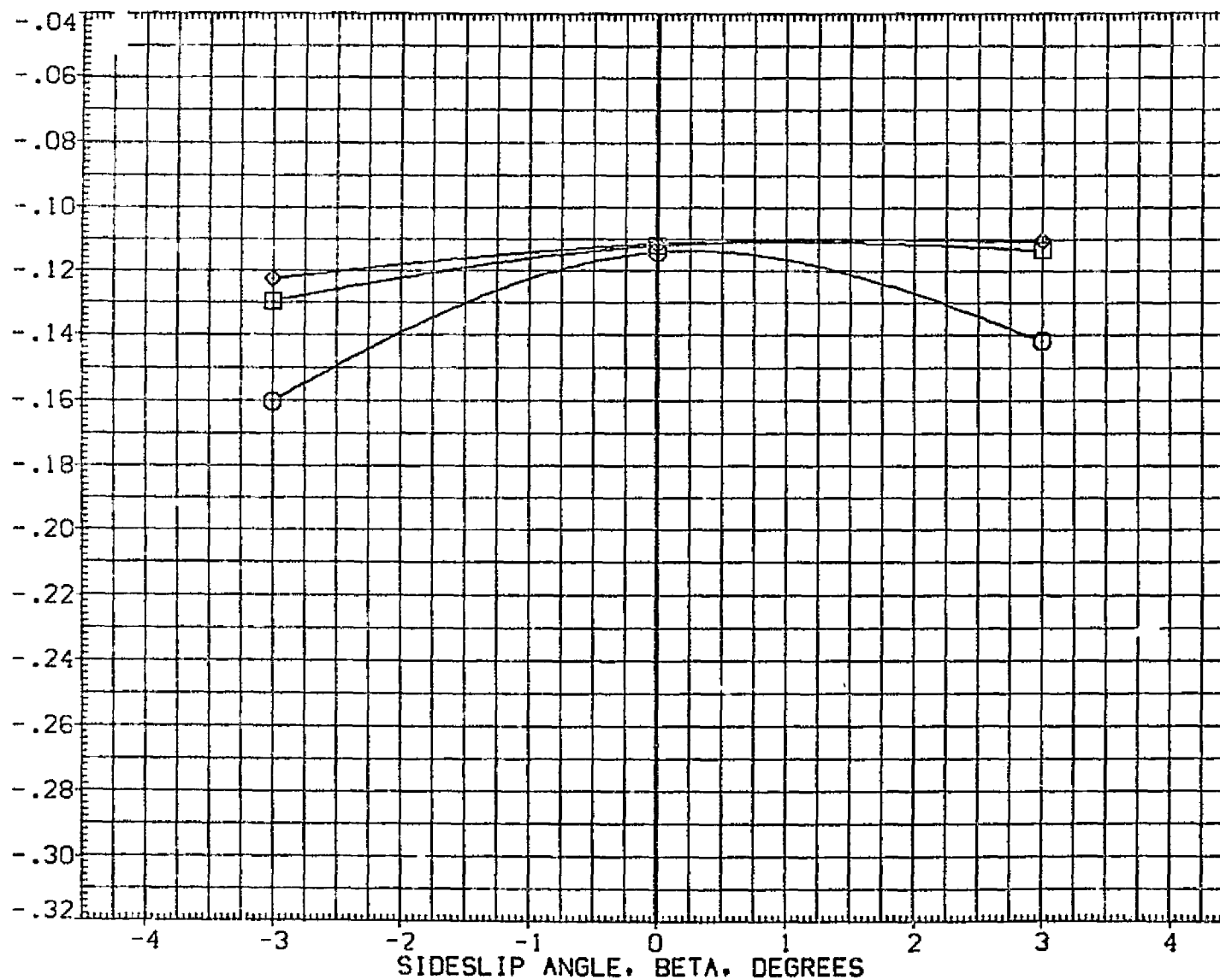


FIGURE 92. AMPLIFICATION FACTOR IN YAW, N84 JETS

01N84

LARC CFHT 118 (MA-22)

(FJA094)

SYMBOL	T/OA-1	MACH	PARAMETRIC VALUES		
○	47.500	10.330	ALPHA	10.000	
□	95.000	BDFLAP	.000	T/OA	95.000
◇	127.700	NO.JET	2.000	ELEVON	.000

REFERENCE INFORMATION		
SREF	2690.0000	50. FT.
LREF	474.8000	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - AXIAL FORCE, N(AF)

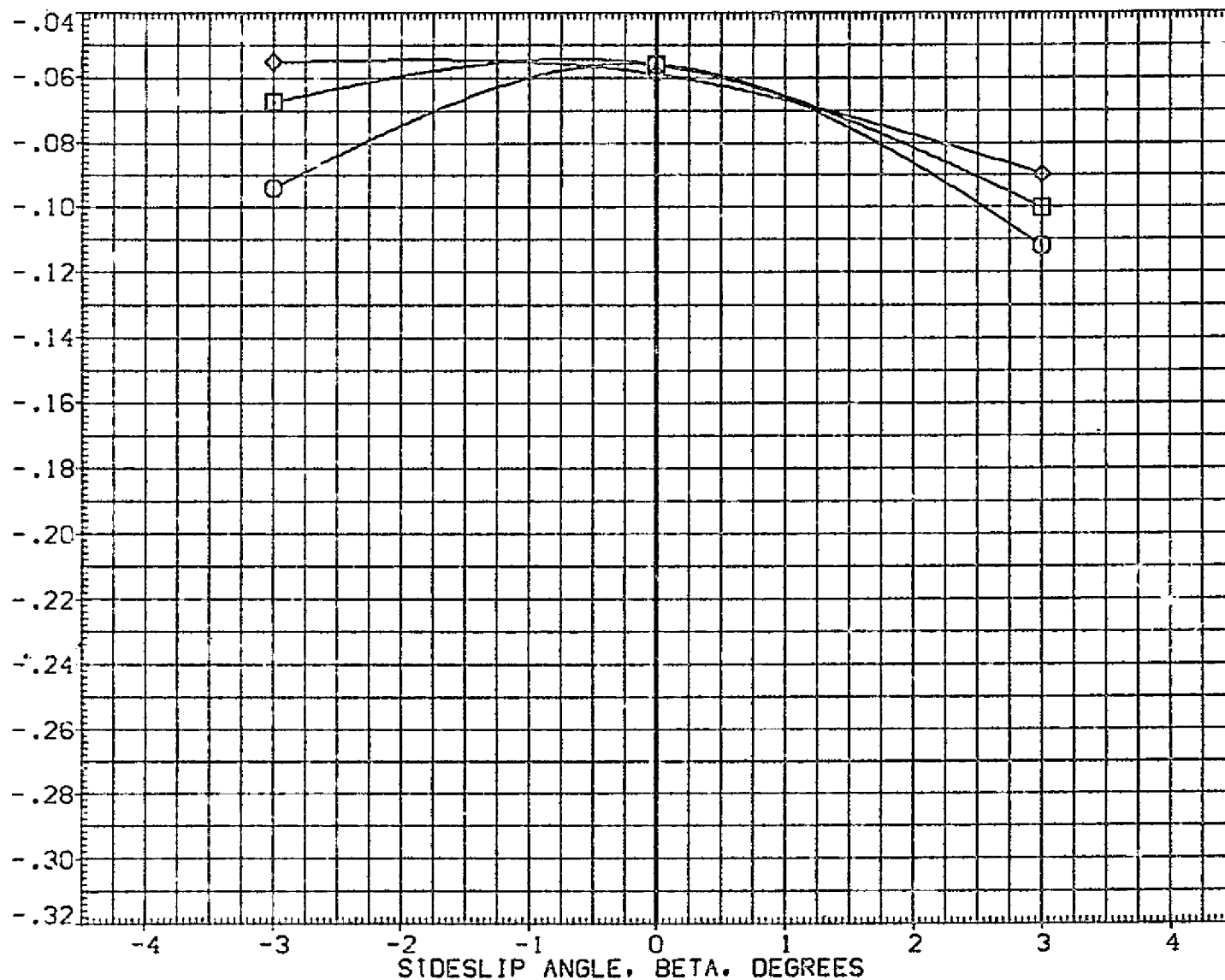


FIGURE 92. AMPLIFICATION FACTOR IN YAW, N84 JETS

SYMBOL	T/QA-1	PARAMETRIC VALUES			
○	47.500	MACH	10.330	ALPHA	20.000
□	95.000	BDFLAP	.000	T/QA	95.000
◇	127.700	NOJET	2.000	ELEVON	.000

REFERENCE INFORMATION	
SREF	690.0000 SQ. FT.
LREF	474.8000 INCHES
SREF	936.6800 INCHES
XMRP	1076.7000 IN. X0
YMRP	.0000 IN. Y0
ZMRP	375.0000 IN. Z0
SCALE	.0100

RCS JET AMPLIFICATION FACTOR - AXIAL FORCE, N(AF)

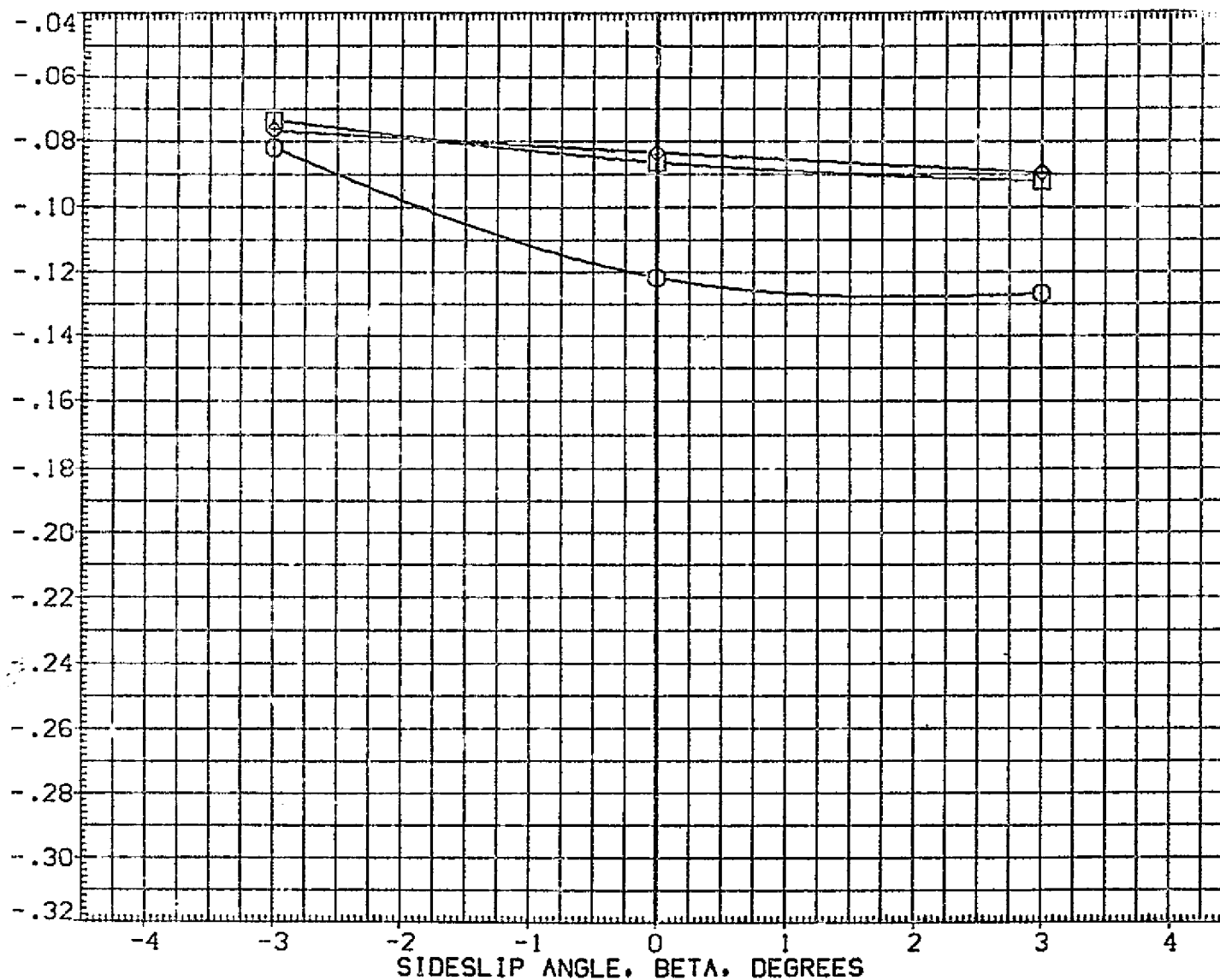


FIGURE 92. AMPLIFICATION FACTOR IN YAW, N84 JETS

01N84

LARC CFHT 118 (MA-22)

(FJA094)

SYMBOL	T/OA-1	PARAMETRIC VALUES
○	47.500	MACH 10.330 ALPHA 35.000
□	95.000	BDFLAP .000 T/OA 95.000
◇	127.700	NO.JET 2.000 ELEVON .000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8000	INCHES
BREF	936.6800	INCHES
XHRP	1076.7000	IN. X0
YHRP	.0000	IN. Y0
ZHRP	375.0000	IN. Z0
SCALE	.0100	

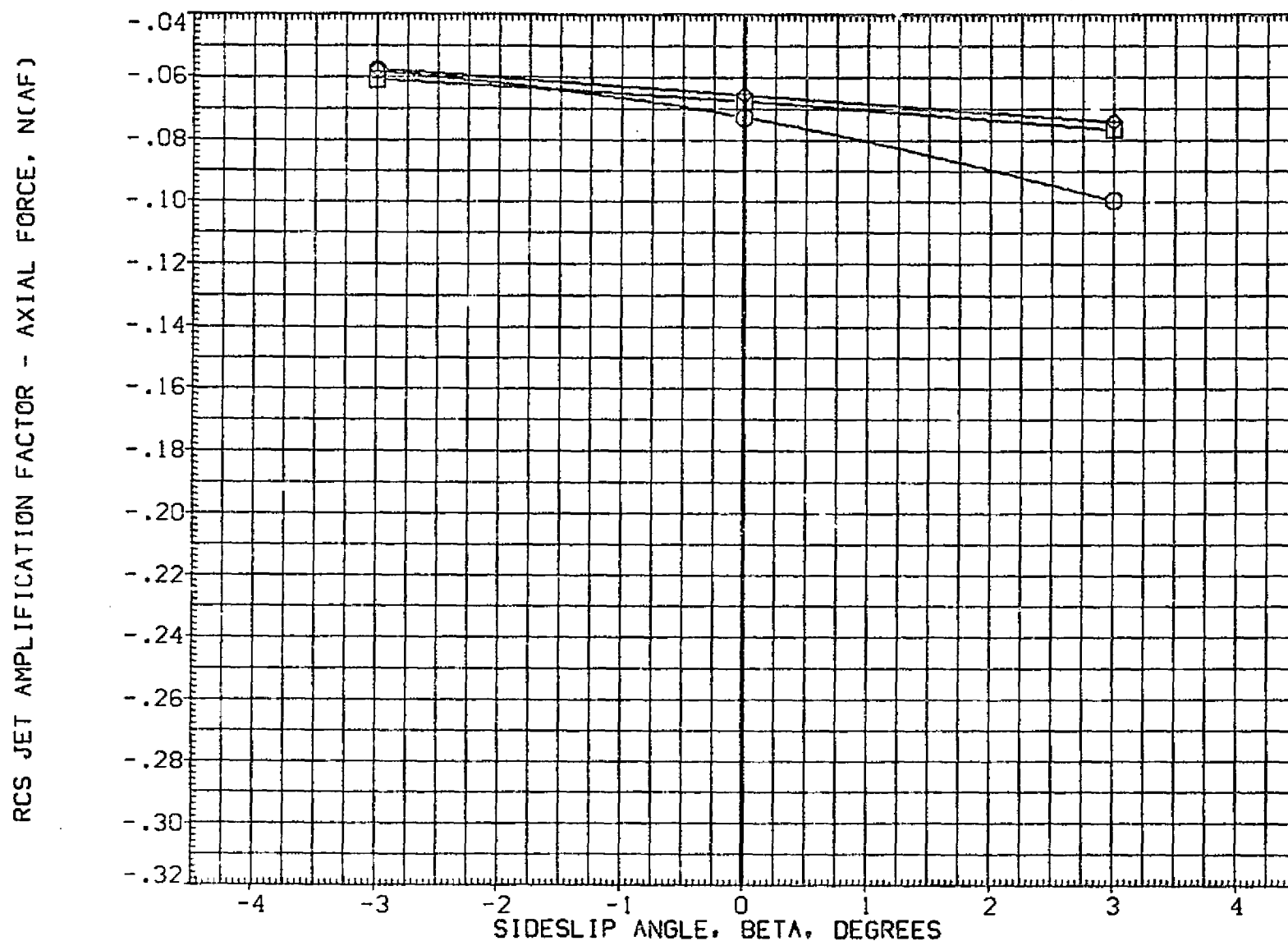


FIGURE 92. AMPLIFICATION FACTOR IN YAW, N84 JETS

SYMBOL	T/QA-1	MACH	PARAMETRIC VALUES		
○	47.500		10.330	ALPHA	-10.000
□	95.000	BDFLAP	.000	T/QA	95.000
◇	127.700	W/JET	2.000	ELEVON	.000

REFERENCE INFORMATION		
SREF	2090.0000	50 FT.
LREF	474.8000	INCHES
BREF	935.6800	INCHES
AMRP	1076.7000	IN. YO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. YO
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - SIDE FORCE, N(SF)

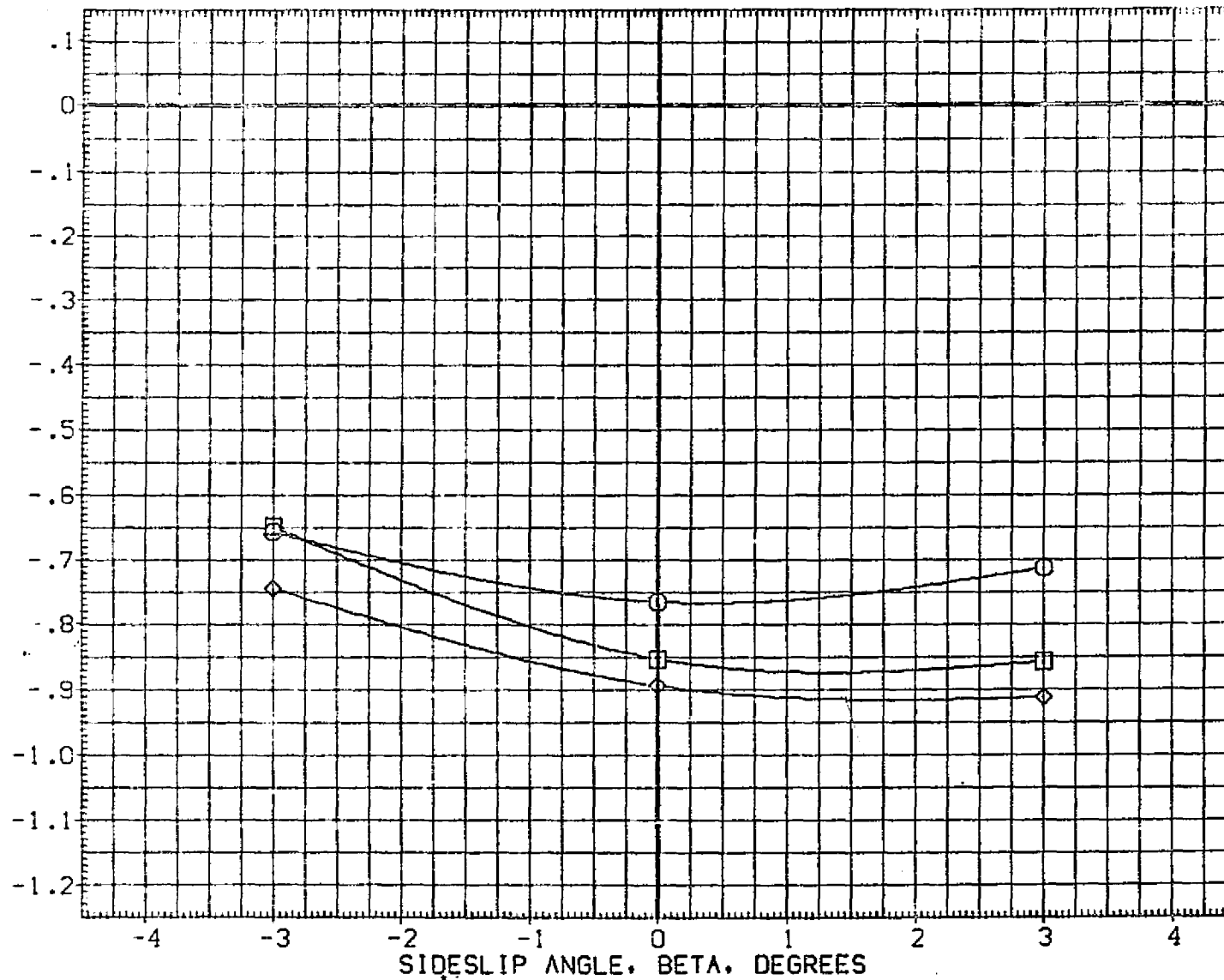


FIGURE 92. AMPLIFICATION FACTOR IN YAW, N84 JETS

10000 10000 10000 10000 10000 10000
 10000 10000 10000 10000 10000 10000
 10000 10000 10000 10000 10000 10000
 10000 10000 10000 10000 10000 10000

REFERENCE INFORMATION
 10000 10000 10000 10000 10000 10000
 10000 10000 10000 10000 10000 10000
 10000 10000 10000 10000 10000 10000
 10000 10000 10000 10000 10000 10000

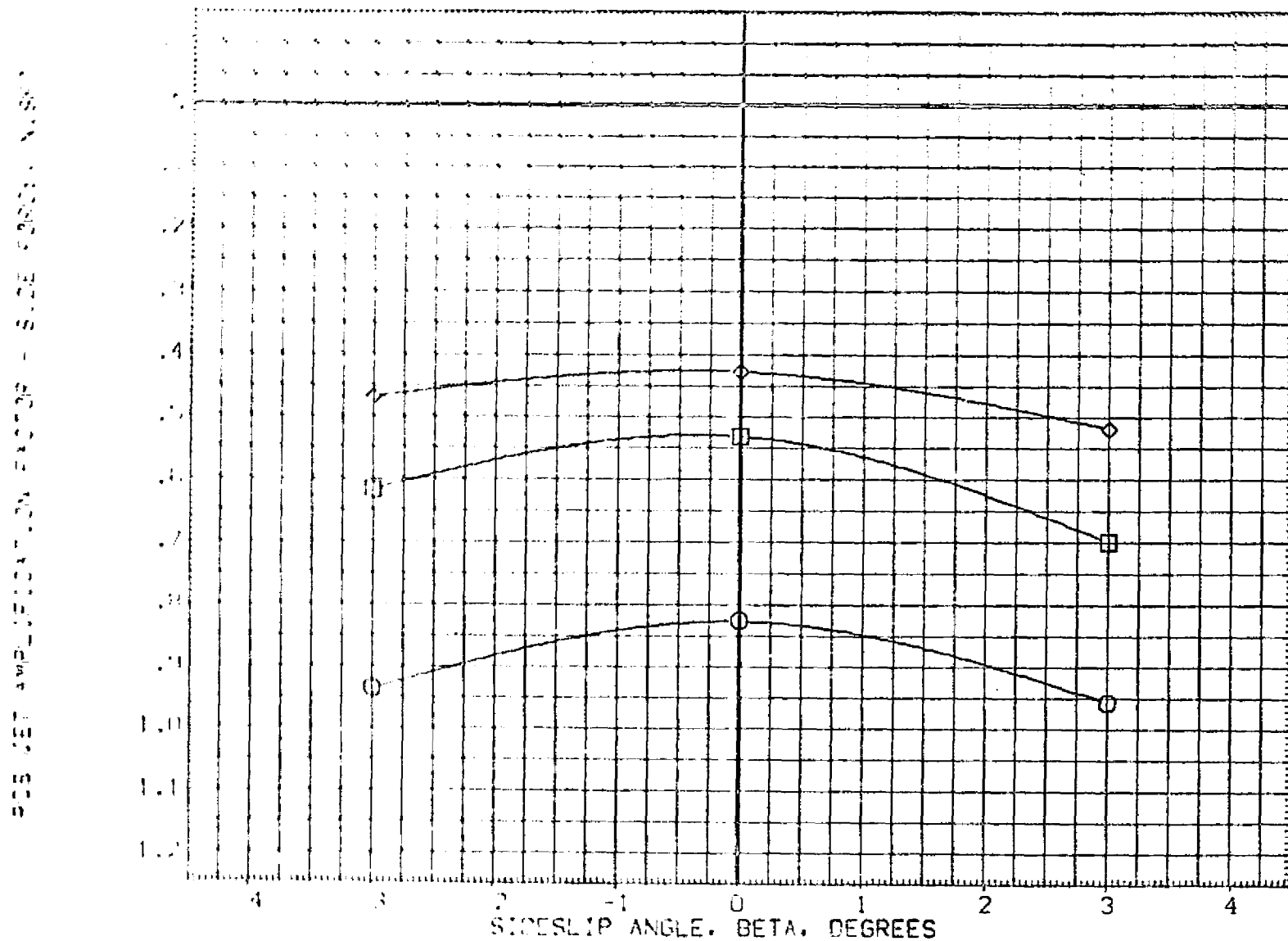


FIGURE 92. AMPLIFICATION FACTOR IN YAW, N84 JETS

01N34

LARC CFHT 118 (MA-22)

(FJA094)

SYMBOL

○
□
◇

T/QA-1

47.500
95.000
127.700

MACH

BOFLAP

NOJET

PARAMETRIC VALUES

10.330

.000

2.000

ALPHA

T/QA

ELEVON

10.000

95.000

.000

REFERENCE INFORMATION

SREF

LREF

BREF

XMRP

YMRP

SCALE

2690.0000

474.8000

936.6800

1076.7000

.0000

375.0000

.0100

SQ.FT.

INCHES

INCHES

IN. X0

IN. Y0

IN. Z0

RCS JET AMPLIFICATION FACTOR - SIDE FORCE, N(SF)

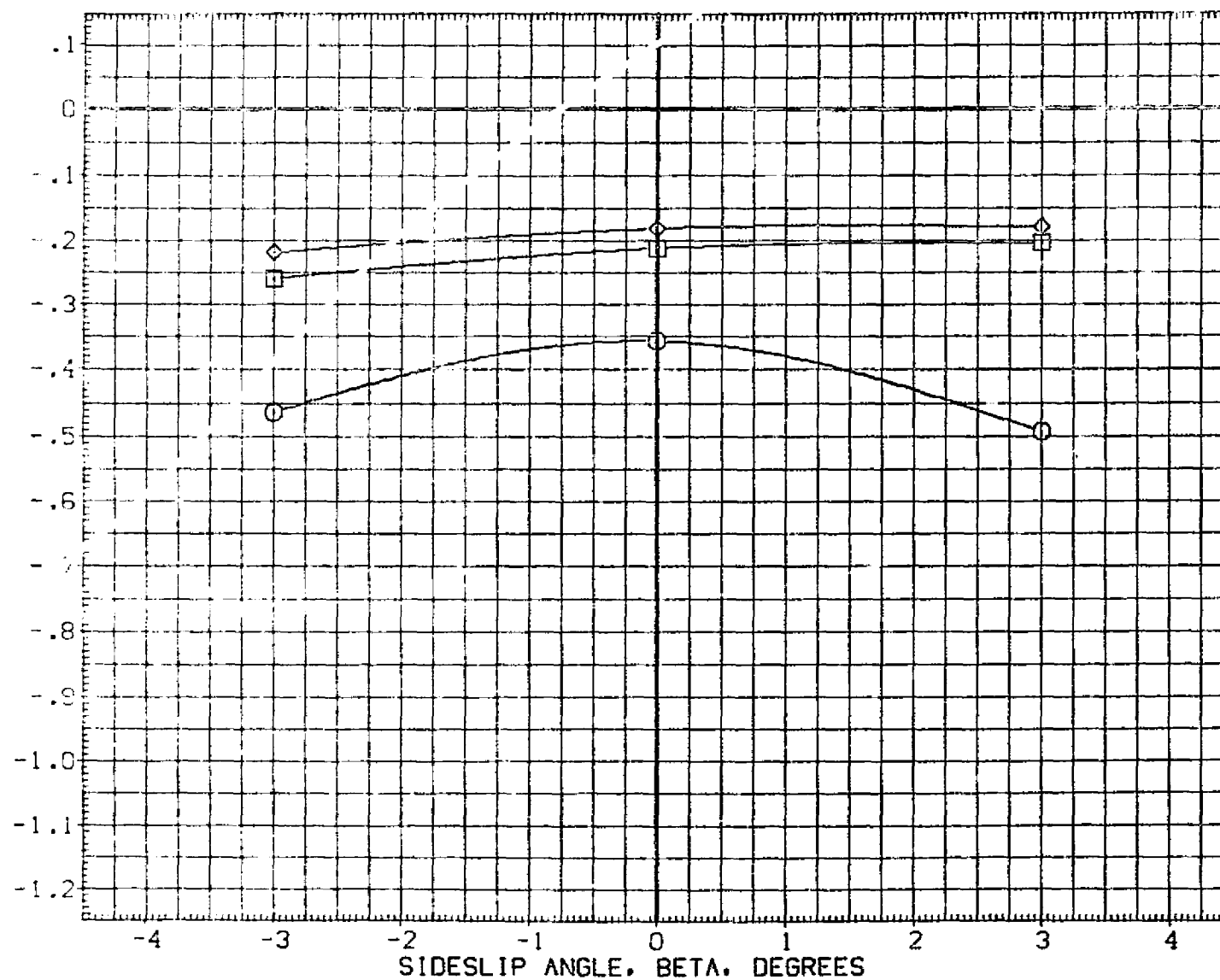


FIGURE 92. AMPLIFICATION FACTOR IN YAW, N84 JETS

01N84

LARC CFHT 118 (MA-22)

(FJA094)

SYMBOL	T/OA-1	PARAMETRIC VALUES
○	47.500	MACH 10.330 ALPHA 20.000
□	95.000	BDFLAP .000 T/OA 95.000
◇	127.700	NO JET 2.000 ELEVON .000

REFERENCE INFORMATION		
SREF	2690.0000	50. FT.
LREF	474.8000	INCHES
BREF	936.6800	INCHES
XM RP	1076.7000	IN. X0
YM RP	.0000	IN. Y0
ZM RP	375.0000	IN. Z0
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - SIDE FORCE, N(SF)

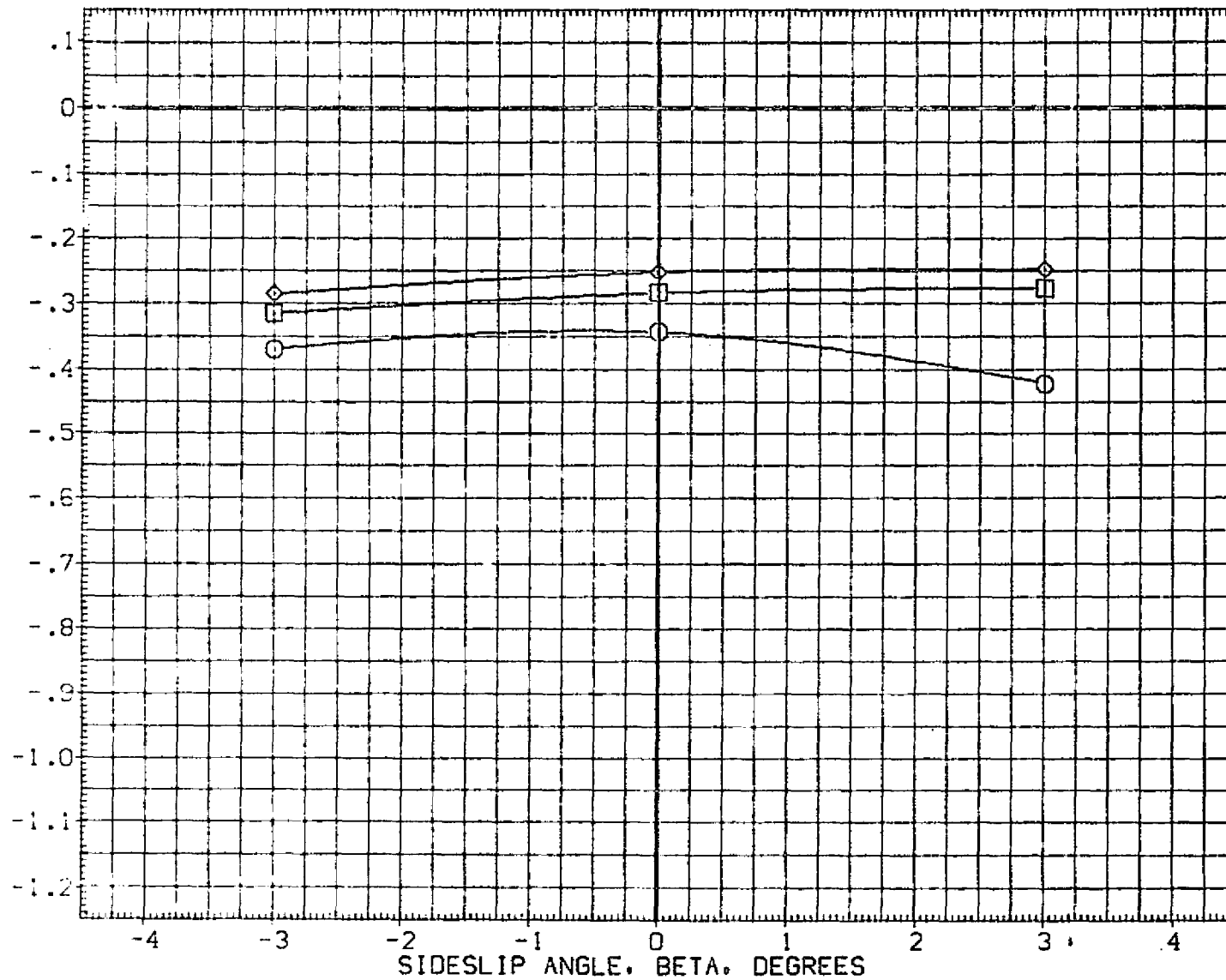


FIGURE 92. AMPLIFICATION FACTOR IN YAW, N84 JETS

01N84

LARC CFHT 118 (MA-22)

(FJA094)

SYMBOL

T/OA-1

PARAMETRIC VALUES

OCT 5

47.000

MACH

10.000

ALPHA

05.000

95.000

NO. JET

1.000

T/OA

95.000

107.000

NO. JET

2.000

ELEVON

.000

REFERENCE INFORMATION

SREF	2680.0000	SQ.FT.
LREF	174.8000	INCHES
BREF	936.6800	INCHES
XPRP	1076.7000	IN. X0
YPRP	.0000	IN. Y0
ZPRP	375.0000	IN. Z0
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - SIDE FORCE, N(SF)

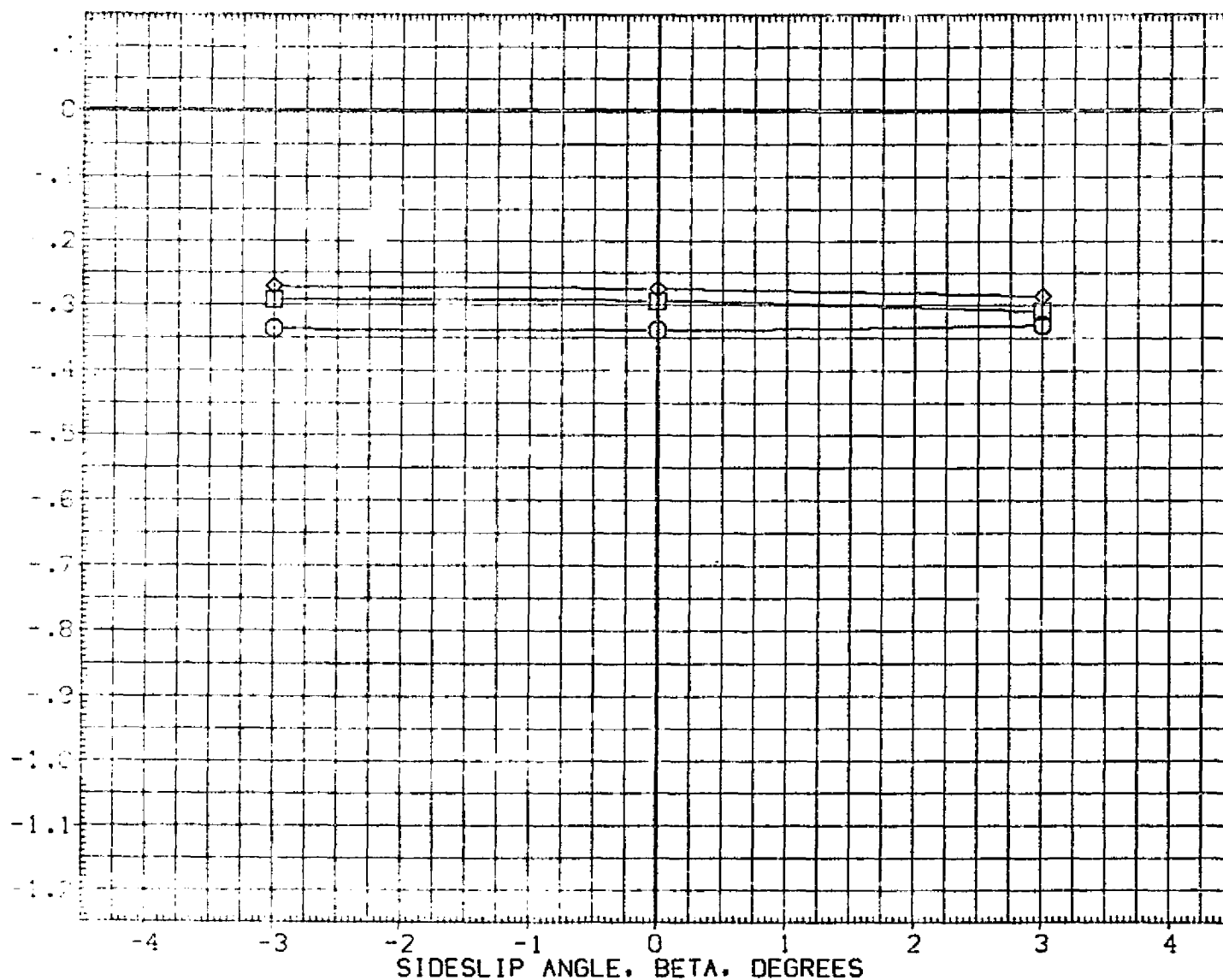


FIGURE 92. AMPLIFICATION FACTOR IN YAW, N84 JETS

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(SJA071) □ 01N31 LARC CFHT 118 (MA-22)
 (SJA072) □ 01N34 LARC CFHT 118 (MA-22)
 (SJA073) △ 01N47 LARC CFHT 118 (MA-22)
 (SJA074) ◇ 01N43 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BD FLAP	BETA	REFERENCE INFORMATION		
.000	2.000	.000	.000	SREF	2690.0000	50. FT.
.000	2.000	.000	.000	LREF	474.8000	INCHES
.000	2.000	.000	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.0100	



FIGURE 93. AREA RATIO EFFECTS. L/H DOWN FIRING JETS

(A) ALPHA = -8.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SCA071)	QIN31 LARC CFHT 118 (MA-22)
(SCA072)	QIN34 LARC CFHT 118 (MA-22)
(SCA073)	QIN47 LARC CFHT 118 (MA-22)
(SCA074)	QIN43 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BDFLAP	BETA	REFERENCE INFORMATION		
.000	2.000	.000	.000	SREF	2690.0000	50.0 FT.
.000	2.000	.000	.000	LREF	474.8000	100.0 FT.
.000	2.000	.000	.000	BREF	936.6800	100.0 FT.
.000	2.000	.000	.000	WARP	1076.7000	100.0 FT.
				WARP	.0000	IN. YR
				WARP	375.0	IN. YR
				SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - NORMAL FORCE, N(NF)

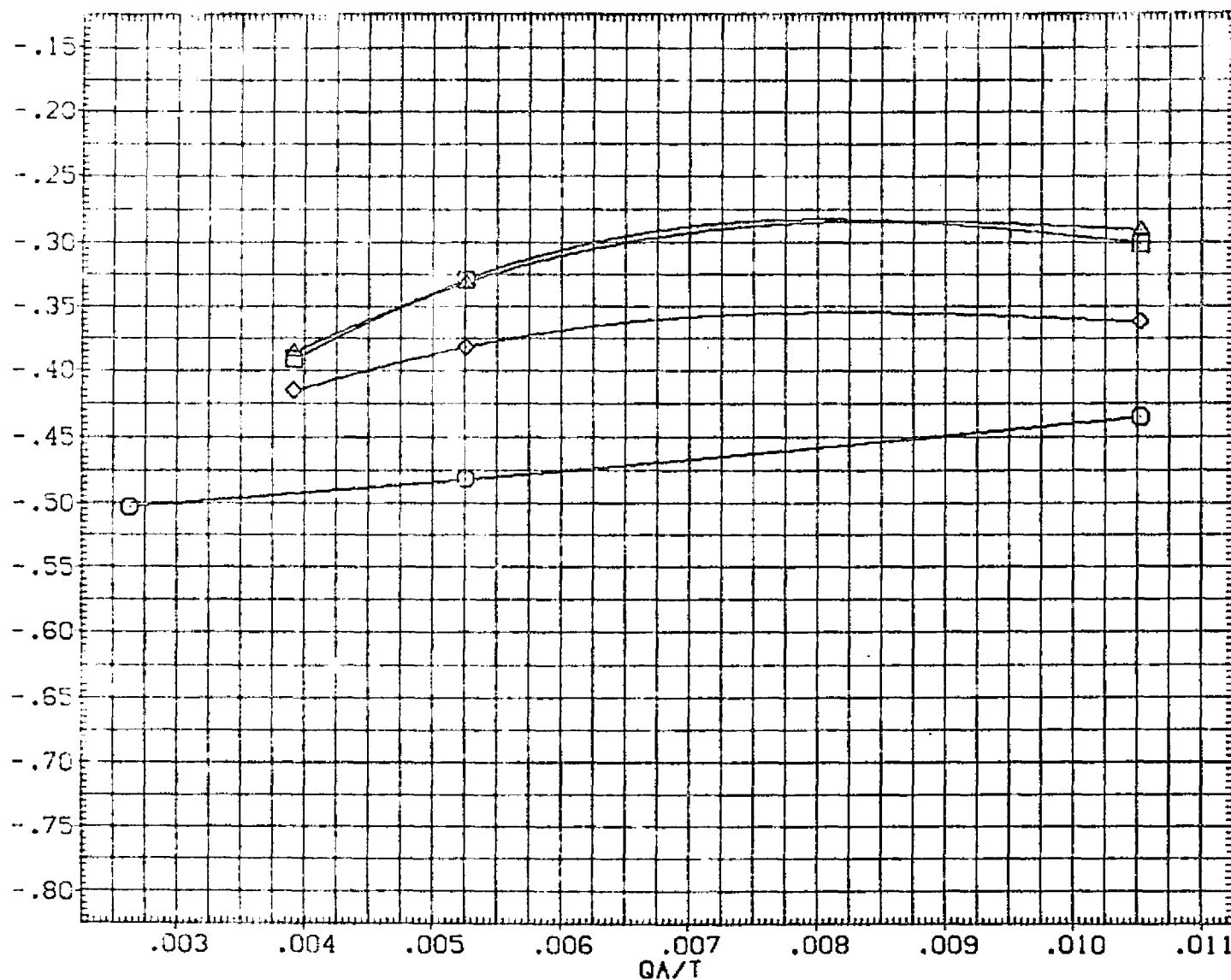


FIGURE 93. AREA RATIO EFFECTS, L/H DOWN FIRING JETS

(B) ALPHA = -6.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA071)	01N31 LARC CFHT 118 (MA-22)
(SJA072)	01N34 LARC CFHT 118 (MA-22)
(SJA073)	01N47 LARC CFHT 118 (MA-22)
(SJA074)	01N43 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BDFLAP	BETA	REFERENCE INFORMATION
.000	2.000	.000	.000	SREF 2690.0000 SQ. FT.
.000	2.000	.000	.000	LREF 474.8000 INCHES
.000	2.000	.000	.000	BREF 936.6800 INCHES
.000	2.000	.000	.000	XMRP 1076.7000 IN. X0
				YMRP .0000 IN. Y0
				ZMRP 375.0000 IN. Z0
				SCALE .0100

RCS JET AMPLIFICATION FACTOR - NORMAL FORCE, N(NF)

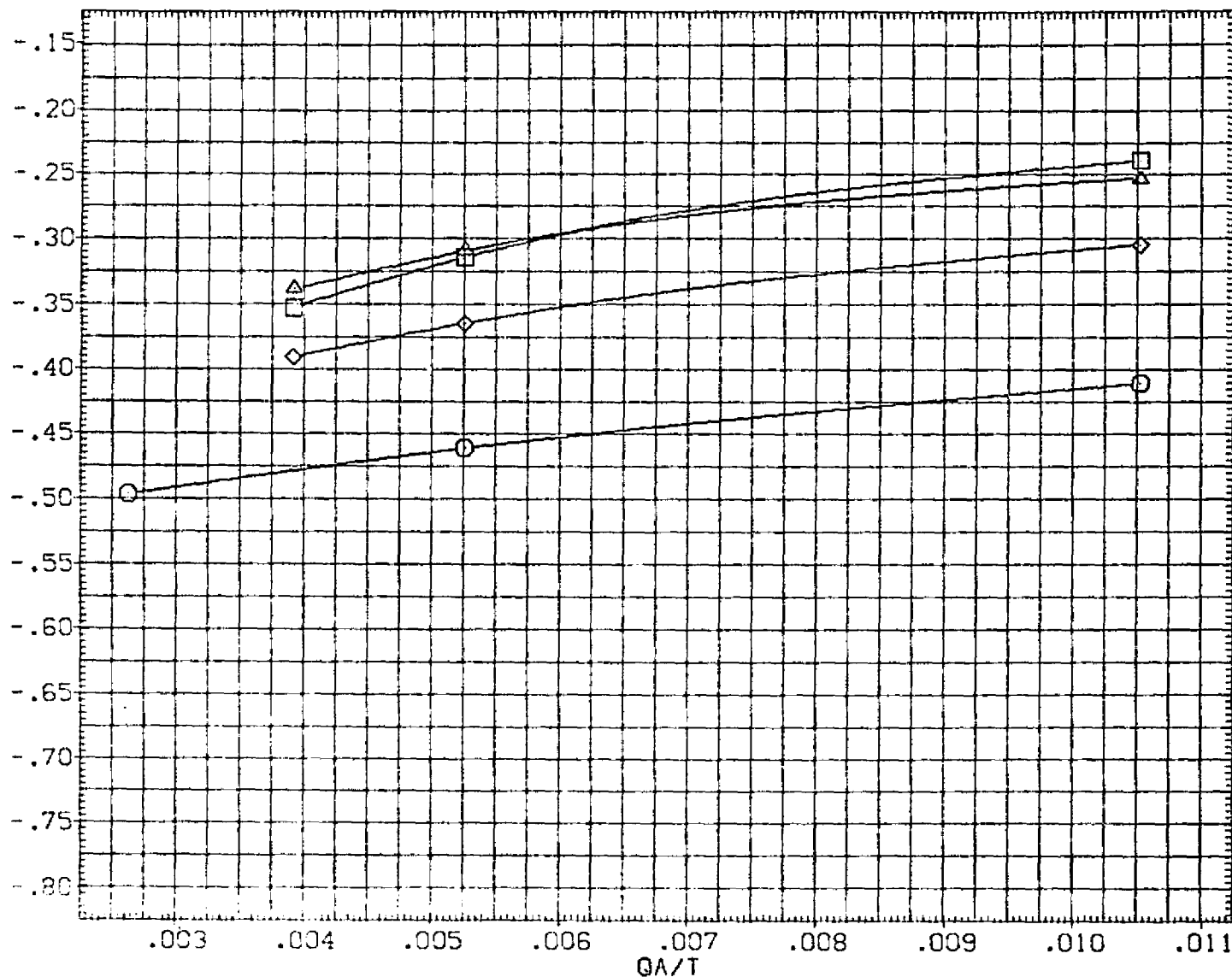


FIGURE 93. AREA RATIO EFFECTS, L/H DOWN FIRING JETS
(C) ALPHA = -4.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA071) □	01N31 LARC CFHT 118 (MA-22)
(SJA072) □	01N34 LARC CFHT 118 (MA-22)
(SJA073) ◇	01N47 LARC CFHT 118 (MA-22)
(SJA074) △	01N43 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BOFLAP	BETA	REFERENCE INFORMATION		
.000	2.000	.000	.000	SREF	2690.0000	50. FT.
.000	2.000	.000	.000	LREF	-474.8000	INCHES
.000	2.000	.000	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - NORMAL FORCE, N(NF)

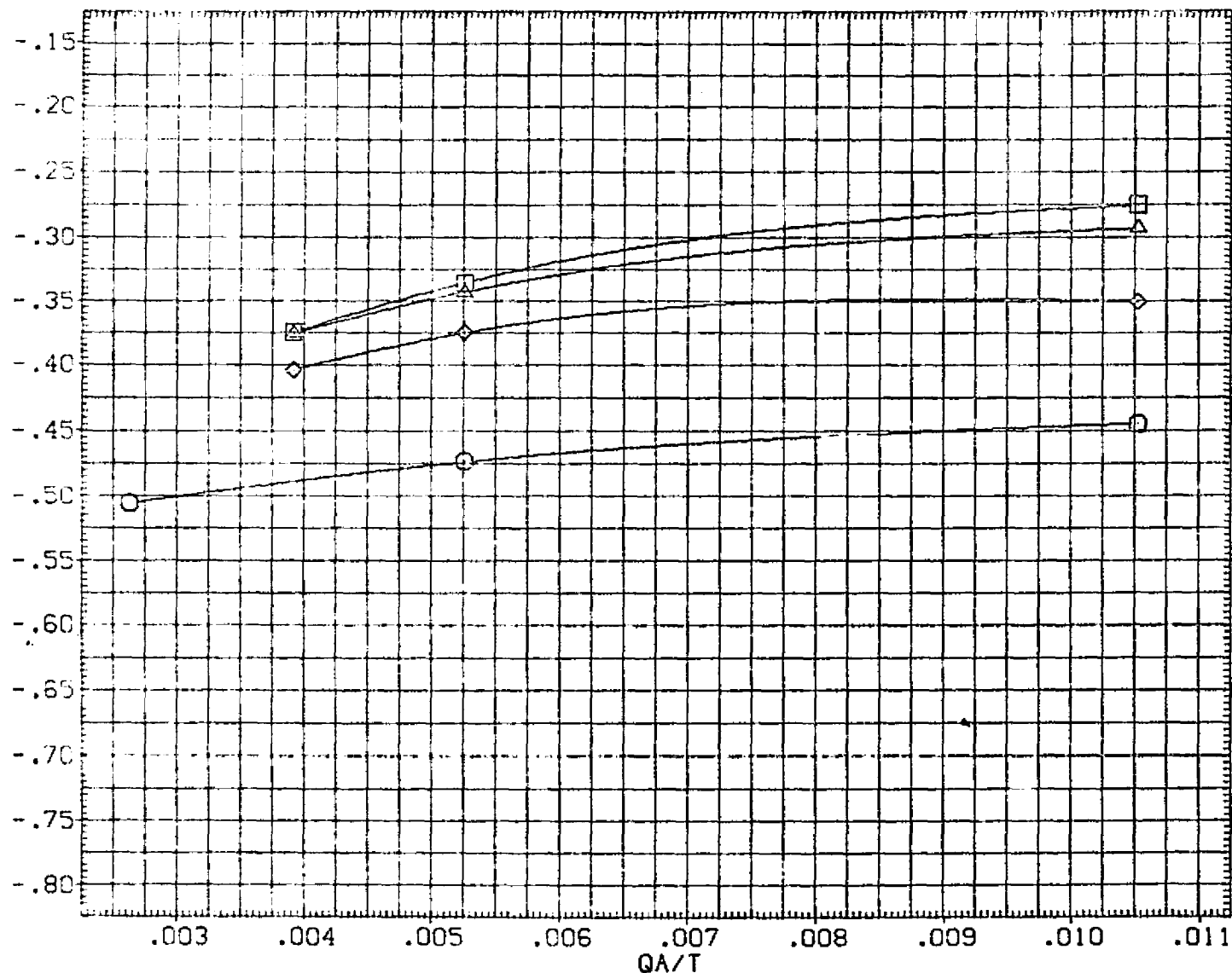


FIGURE 93. AREA RATIO EFFECTS, L/H DOWN FIRING JETS
(D) ALPHA = -2.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA071) ○	01N31 LARC CFHT 118 (MA-22)
(SJA072) □	01N34 LARC CFHT 118 (MA-22)
(SJA073) ◇	01N47 LARC CFHT 118 (MA-22)
(SJA074) △	01N43 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BD FLAP	BETA	REFERENCE INFORMATION		
.000	2.000	.000	.000	SREF	2690.0000	50. FT.
.000	2.000	.000	.000	LREF	474.8000	INCHES
.000	2.000	.000	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XM RP	1076.7000	IN. X0
				YM RP	.0000	IN. Y0
				ZM RP	375.0000	IN. Z0
				SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - NORMAL FORCE, N(NF)

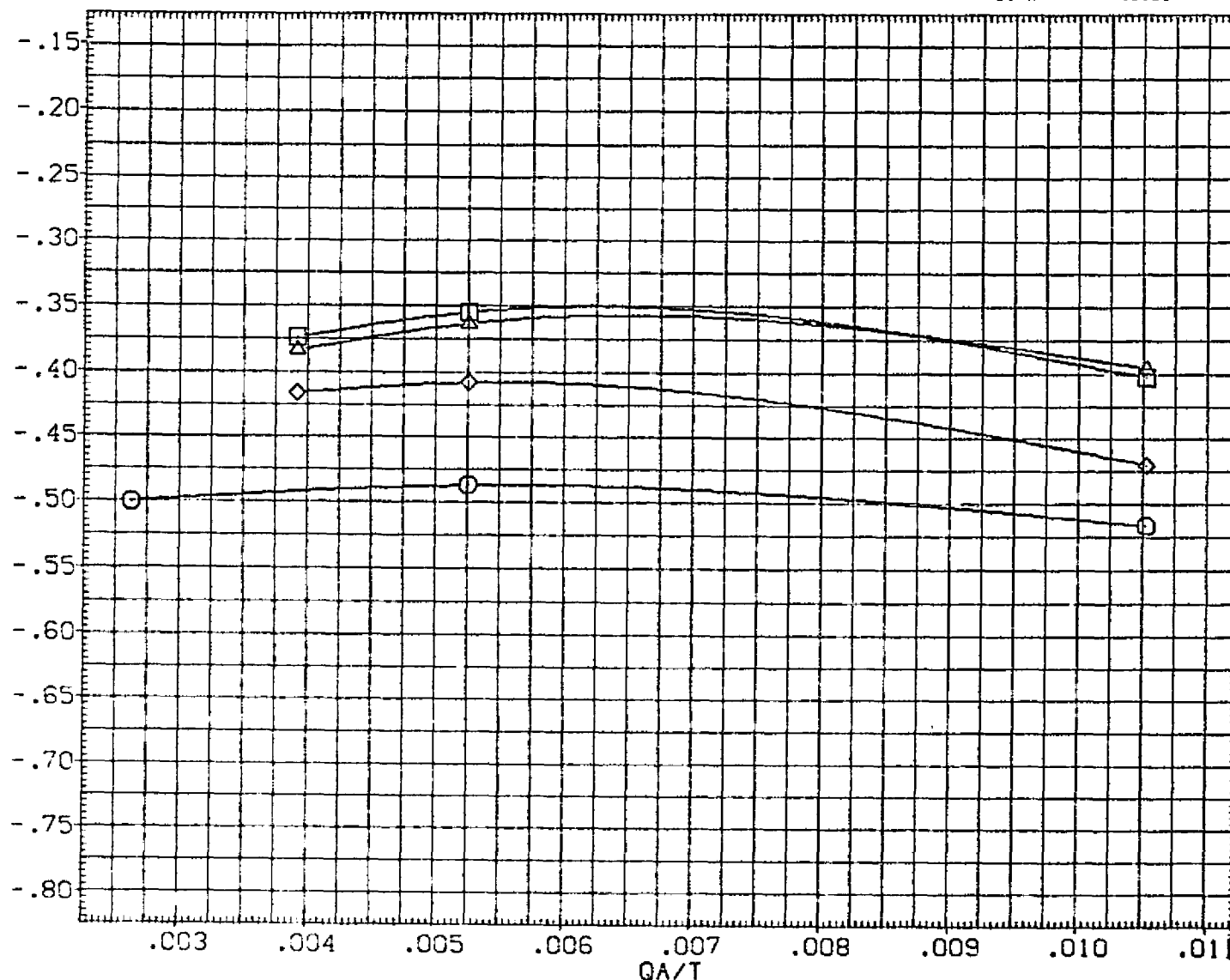


FIGURE 93. AREA RATIO EFFECTS, L/H DOWN FIRING JETS
(E) ALPHA = .00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVGN	NO. JET	BD FLAP	BETA	REFERENCE INFORMATION		
(SJA071)	QIN31 LARC CFMT 118 (MA-22)	.000	2.000	.000	.000	SREF	2690.0000	50. FT.
(SJA072)	QIN34 LARC CFMT 118 (MA-22)	.000	2.000	.000	.000	LREF	474.8000	INCHES
(SJA073)	QIN47 LARC CFMT 118 (MA-22)	.000	2.000	.000	.000	BREF	936.6800	INCHES
(SJA074)	QIN43 LARC CFMT 118 (MA-22)	.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
						YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0100	

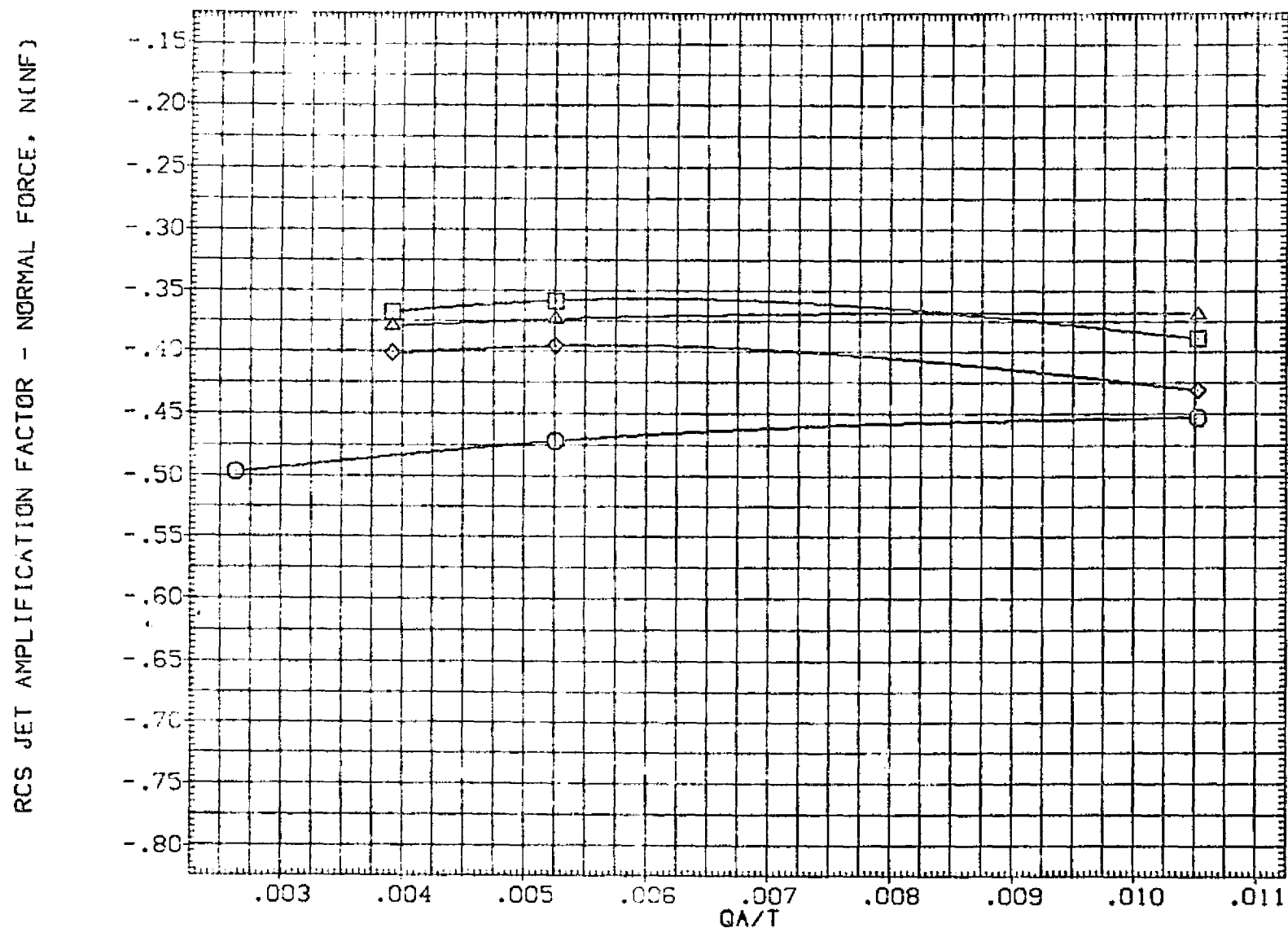


FIGURE 93. AREA RATIO EFFECTS, L/H DOWN FIRING JETS

(F) ALPHA = 2.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA071)	01N31 LARC CFHT 118 (MA-22)
(SJA072)	01N34 LARC CFHT 118 (MA-22)
(SJA073)	01N47 LARC CFHT 118 (MA-22)
(SJA074)	01N43 LARC CFHT 118 (MA-22)

ELEVON	NO.JET	BDFLAP	BETA	REFERENCE INFORMATION		
.000	2.000	.000	.000	SREF	2690.0000	SQ.FT.
.000	2.000	.000	.000	LREF	474.8000	INCHES
.000	2.000	.000	.000	BREF	935.6800	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - NORMAL FORCE, N(NF)

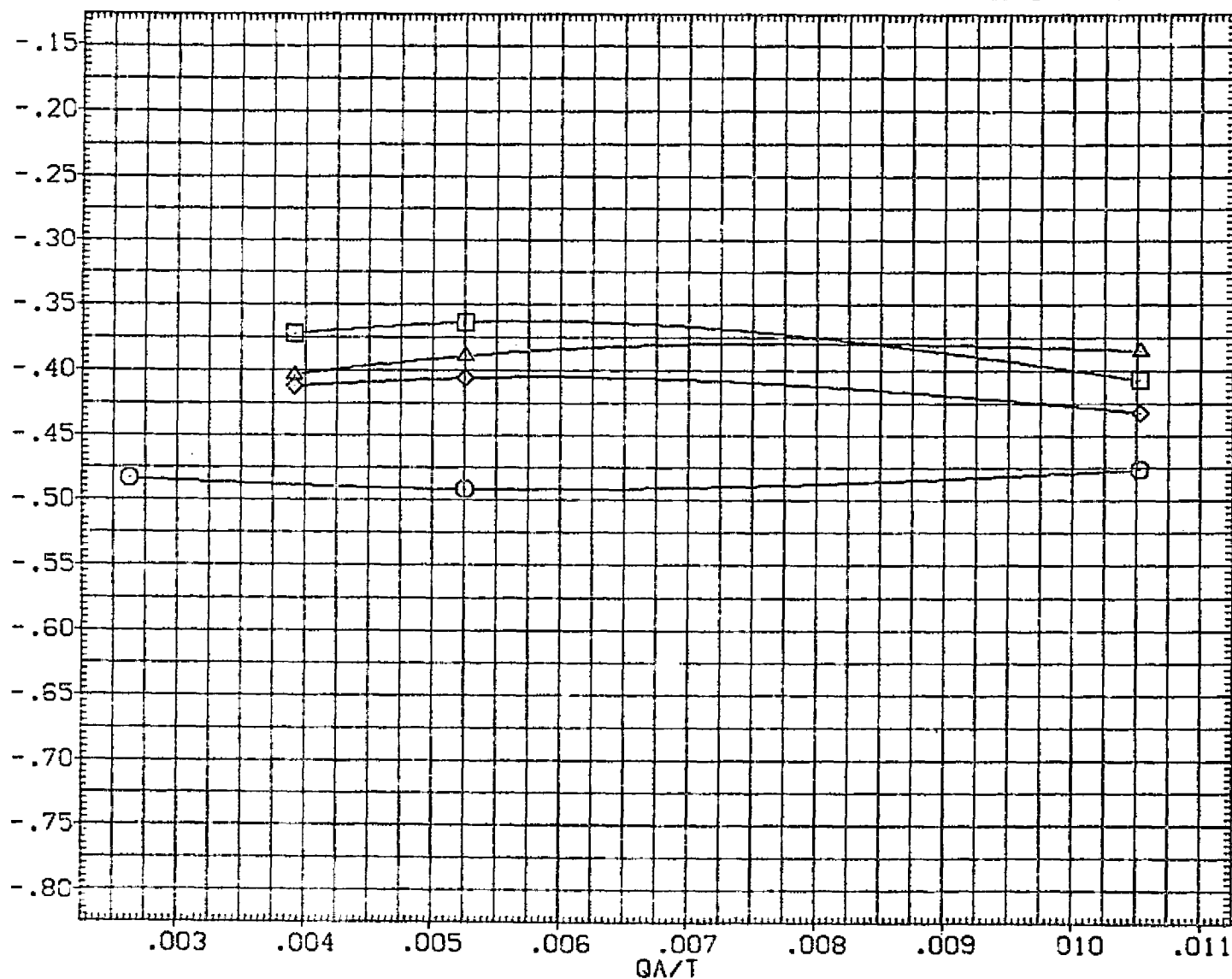


FIGURE 93. AREA RATIO EFFECTS, L/H DOWN FIRING JETS

(G) ALPHA = 4.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA071) ○	QIN31 LARC CFHT 118 (MA-22)
(SJA072) ○	QIN34 LARC CFHT 118 (MA-22)
(SJA073) X	QIN47 LARC CFHT 118 (MA-22)
(SJA074) X	QIN43 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BD FLAP	BETA	REFERENCE INFORMATION	
.000	2.000	.000	.000	SREF	2690.0000 90 FT.
.000	2.000	.000	.000	LREF	1 1.8000 INCHES
.000	2.000	.000	.000	BREF	936.6800 INCHES
.000	2.000	.000	.000	XMRP	1076.7000 IN. 20
				YMRP	.0000 IN. 20
				ZMRP	375.0000 IN. 20
				SCALE	.0100

RCS JET AMPLIFICATION FACTOR - NORMAL FORCE, N(NF)

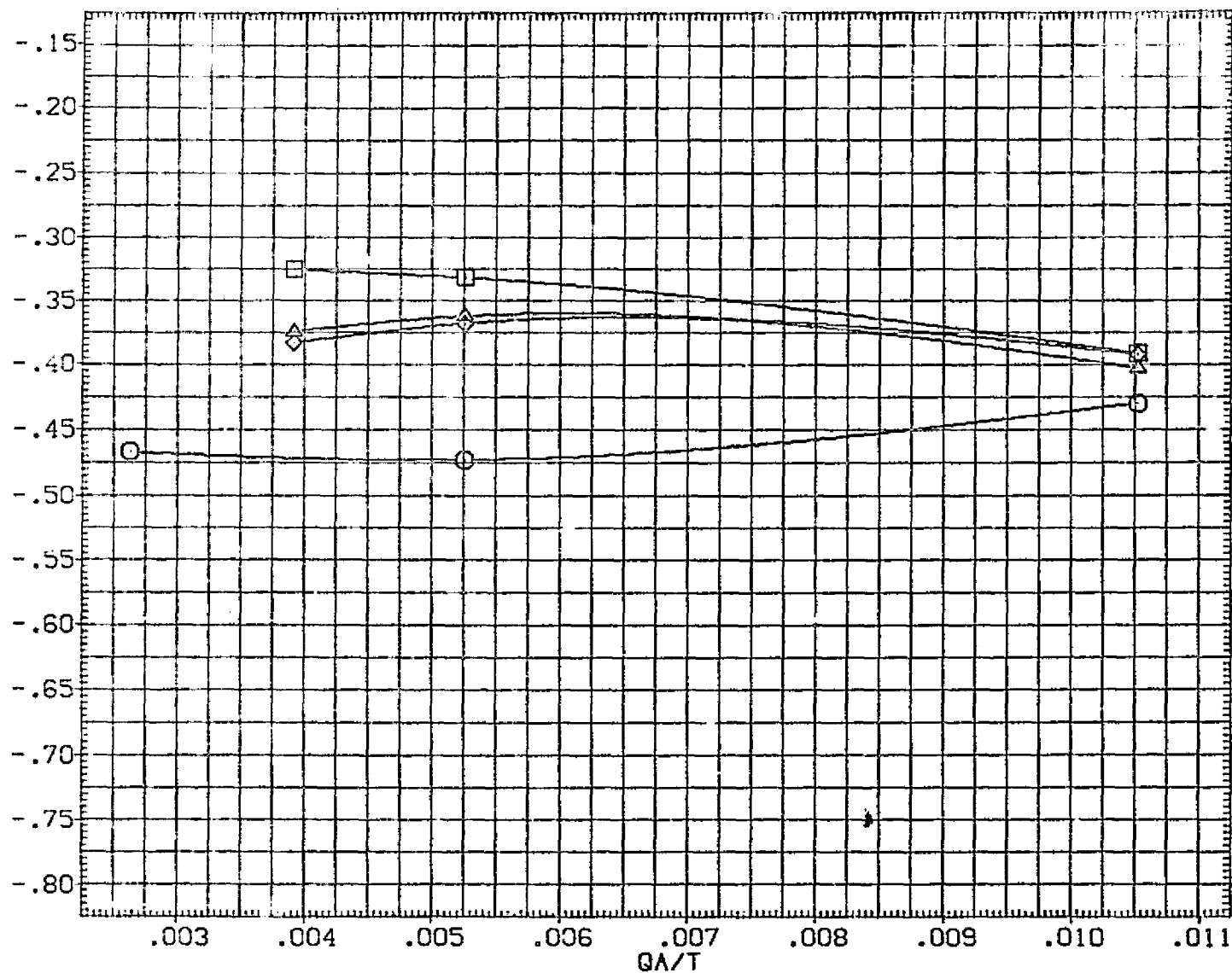


FIGURE 93. AREA RATIO EFFECTS, L/H DOWN FIRING JETS

(H) ALPHA = 6.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA071) ○	01N31 LARC CFHT 118 (MA-22)
(SJA072) □	01N34 LARC CFHT 118 (MA-22)
(SJA073) ◇	01N47 LARC CFHT 118 (MA-22)
(SJA074) △	01N43 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BD FLAP	BETA	REFERENCE INFORMATION
.000	2.000	.000	.000	SREF 2690.0000 SQ. FT.
.000	2.000	.000	.000	LREF 474.8000 INCHES
.000	2.000	.000	.000	BREF 936.6800 INCHES
.000	2.000	.000	.000	XMRP 1076.7000 IN. X0
				YMRP .0000 IN. Y0
				ZMRP 375.0000 IN. Z0
				SCALE .0100

RCS JET AMPLIFICATION FACTOR - NORMAL FORCE, N(NF)

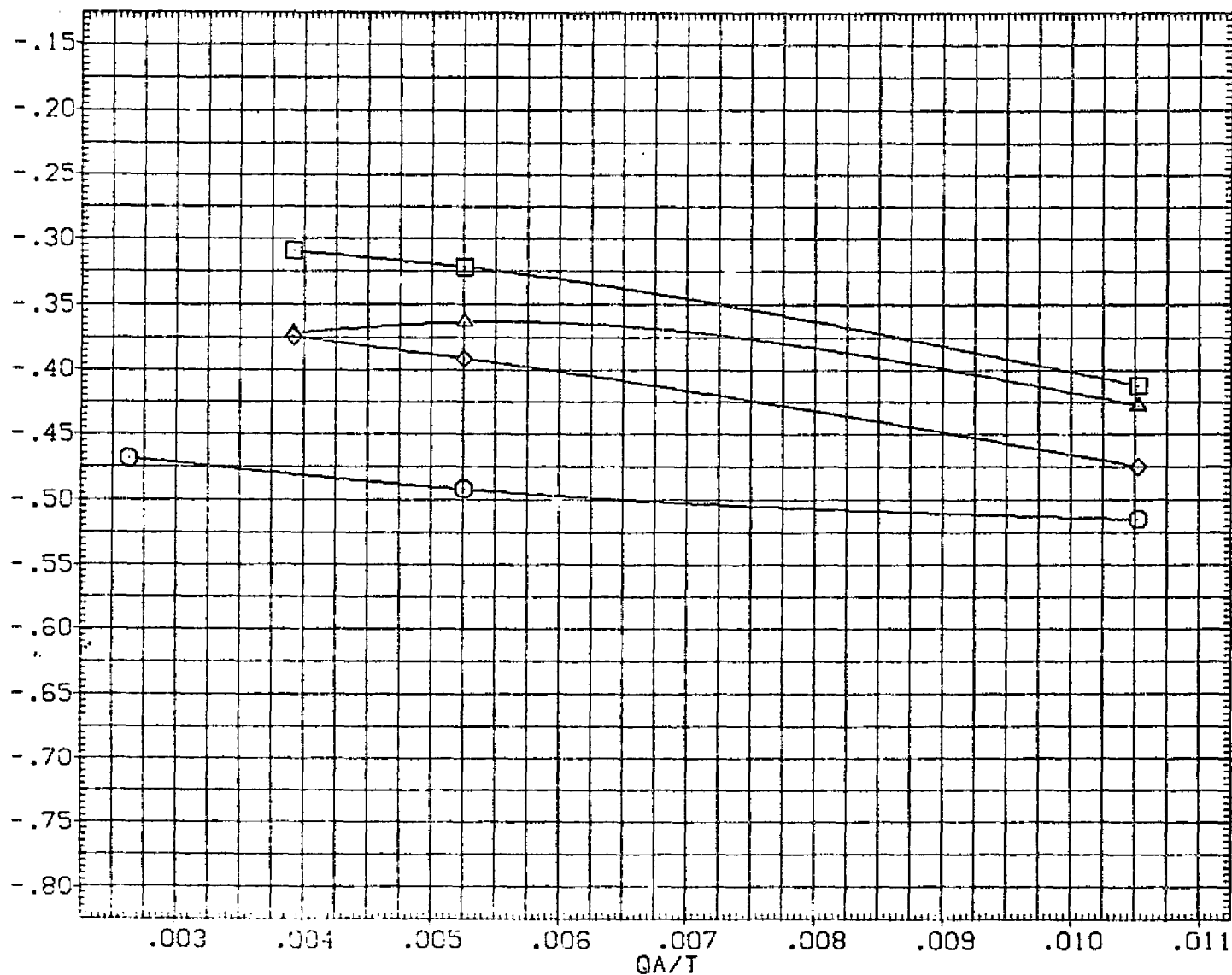


FIGURE 93. AREA RATIO EFFECTS, L/H DOWN FIRING JETS

(1) ALPHA = 8.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA071)	01N31 LARC CFHT 118 (MA-22)
(SJA072)	01N34 LARC CFHT 118 (MA-22)
(SJA073)	01N47 LARC CFHT 118 (MA-22)
(SJA074)	01N43 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BD FLAP	BETA	REFERENCE INFORMATION
.000	2.000	.000	.000	SREF 2690.0000 SQ. FT.
.000	2.000	.000	.000	LREF 474.8000
.000	2.000	.000	.000	BREF 936.6800
.000	2.000	.000	.000	XMRP 1076.7000
				YMRP .0000
				ZMRP 375.0000
				SCALE .0100

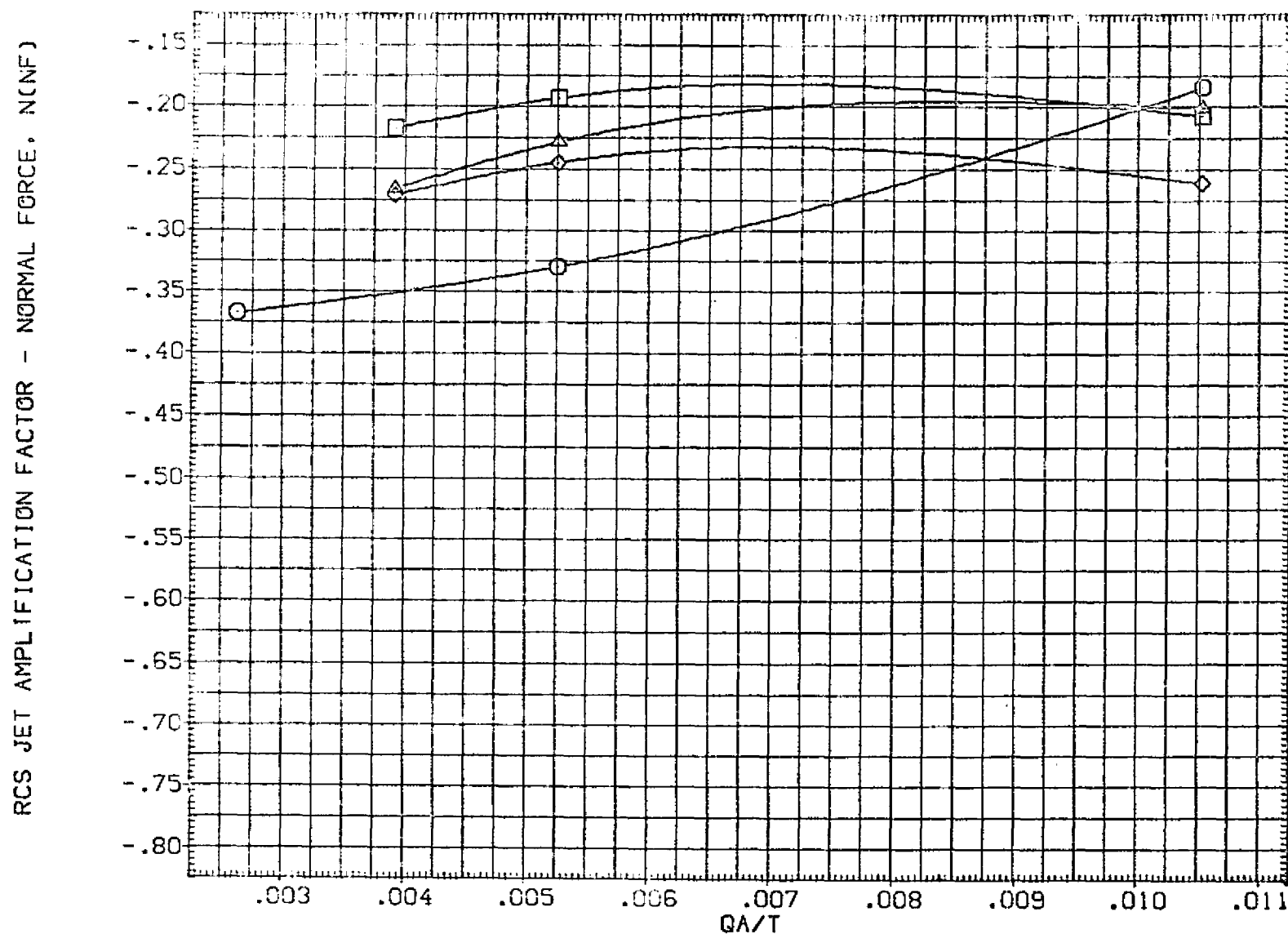


FIGURE 93. AREA RATIO EFFECTS, L/H DOWN FIRING JETS

(J) ALPHA = 10.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	NO.JET	BDFLAP	BETA	REFERENCE INFORMATION		
(SJA071)	01N31 LARC CFHT 118 (MA-22)	.000	2.000	.000	.000	SREF	2690.0000	50.FT.
(SJA072)	01N34 LARC CFHT 118 (MA-22)	.000	2.000	.000	.000	LREF	474.8000	INCHES
(SJA073)	01N47 LARC CFHT 118 (MA-22)	.000	2.000	.000	.000	BREF	936.6800	INCHES
(SJA074)	01N43 LARC CFHT 118 (MA-22)	.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
						YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0100	

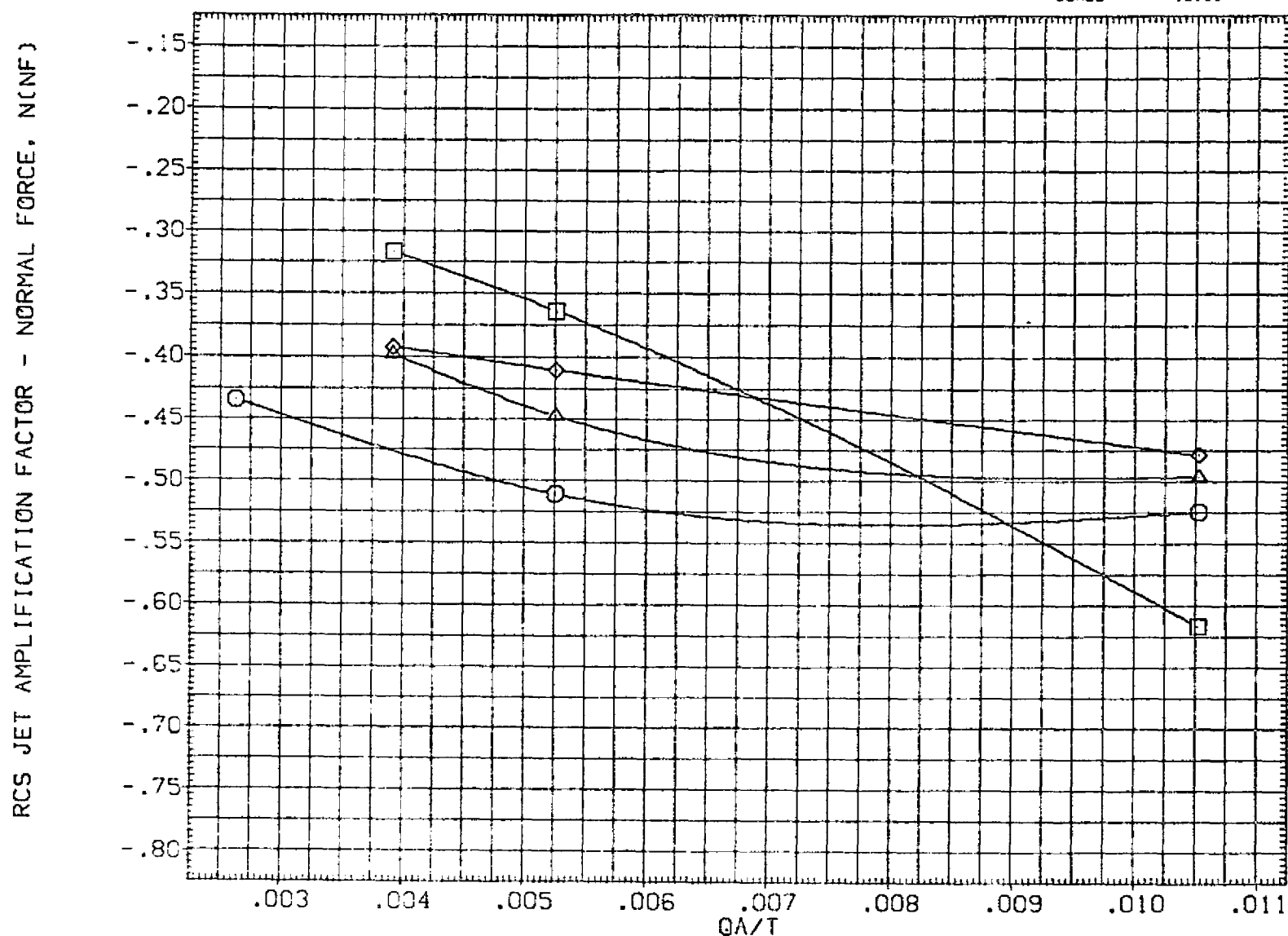


FIGURE 93. AREA RATIO EFFECTS, L/H DOWN FIRING JETS

(K)ALPHA = 15.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA071) □	QIN31 LARC CFHT 118 (MA-22)
(SJA072) ◇	QIN34 LARC CFHT 118 (MA-22)
(SJA073) △	QIN47 LARC CFHT 118 (MA-22)
(SJA074) X	QIN43 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BDFLAP	BETA	REFERENCE INFORMATION
.000	2.000	.000	.000	SREF 2690.0000 SQ FT
.000	2.000	.000	.000	LREF 474.8000 IN
.000	2.000	.000	.000	BREF 936.6800 IN
.000	2.000	.000	.000	XMPP 076.70 IN
.000	2.000	.000	.000	YMRP .0000 IN
.000	2.000	.000	.000	YMRP 375.0000 IN
.000	2.000	.000	.000	YMRP .0100 IN

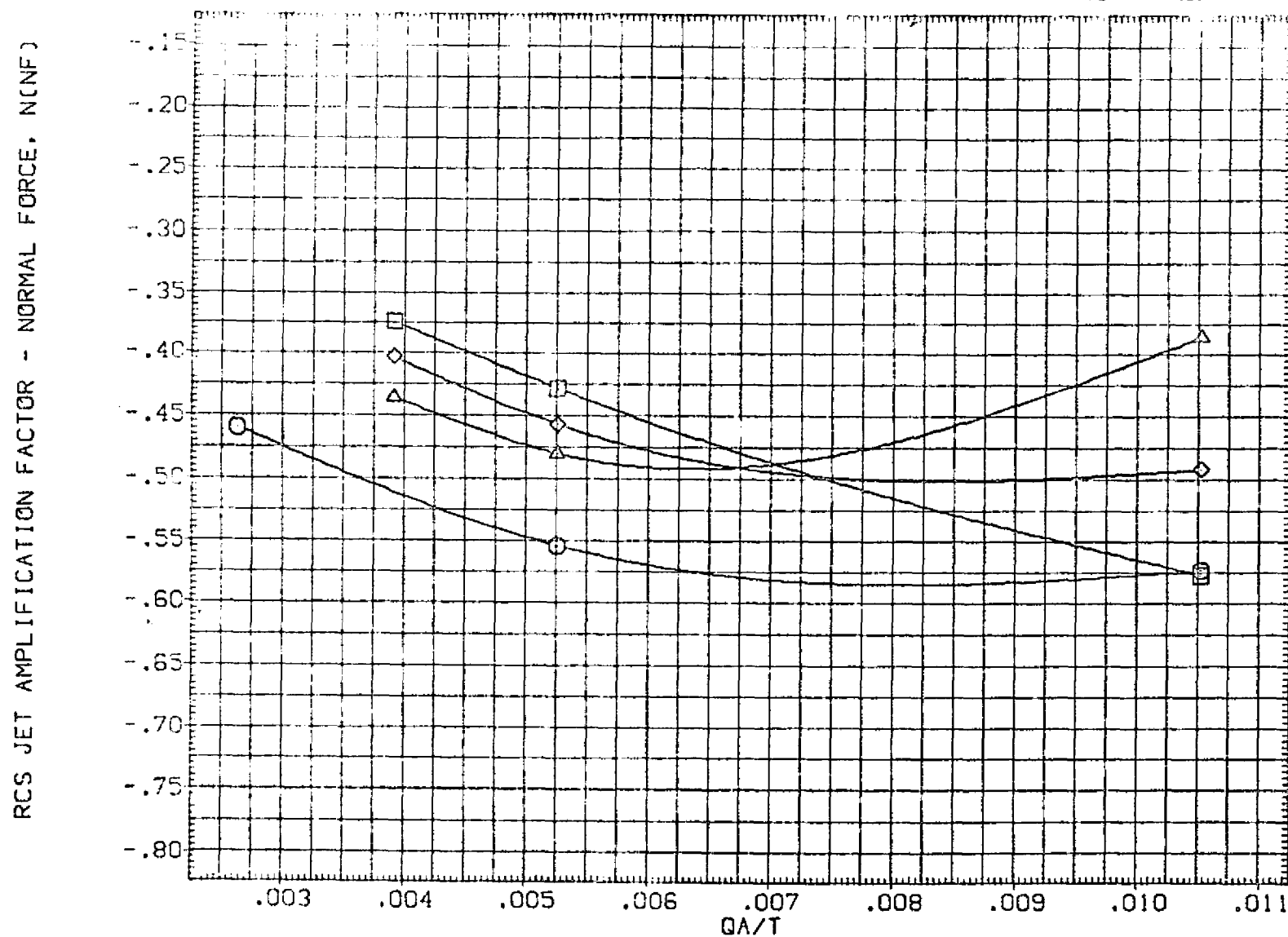


FIGURE 93. AREA RATIO EFFECTS, L/H DOWN FIRING JETS
(L) ALPHA = 20.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	NO. JET	BD FLAP	BETA	REFERENCE INFORMATION		
(SJA071)	01N31 LARC CFHT 118 (MA-22)	.000	2.000	.000	.000	SREF	2690.0000	50. FT.
(SJA072)	01N34 LARC CFHT 118 (MA-22)	.000	2.000	.000	.000	LREF	474.8000	INCHES
(SJA073)	01N47 LARC CFHT 118 (MA-22)	.000	2.000	.000	.000	BREF	936.6800	INCHES
(SJA074)	01N43 LARC CFHT 118 (MA-22)	.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
						YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0.00	

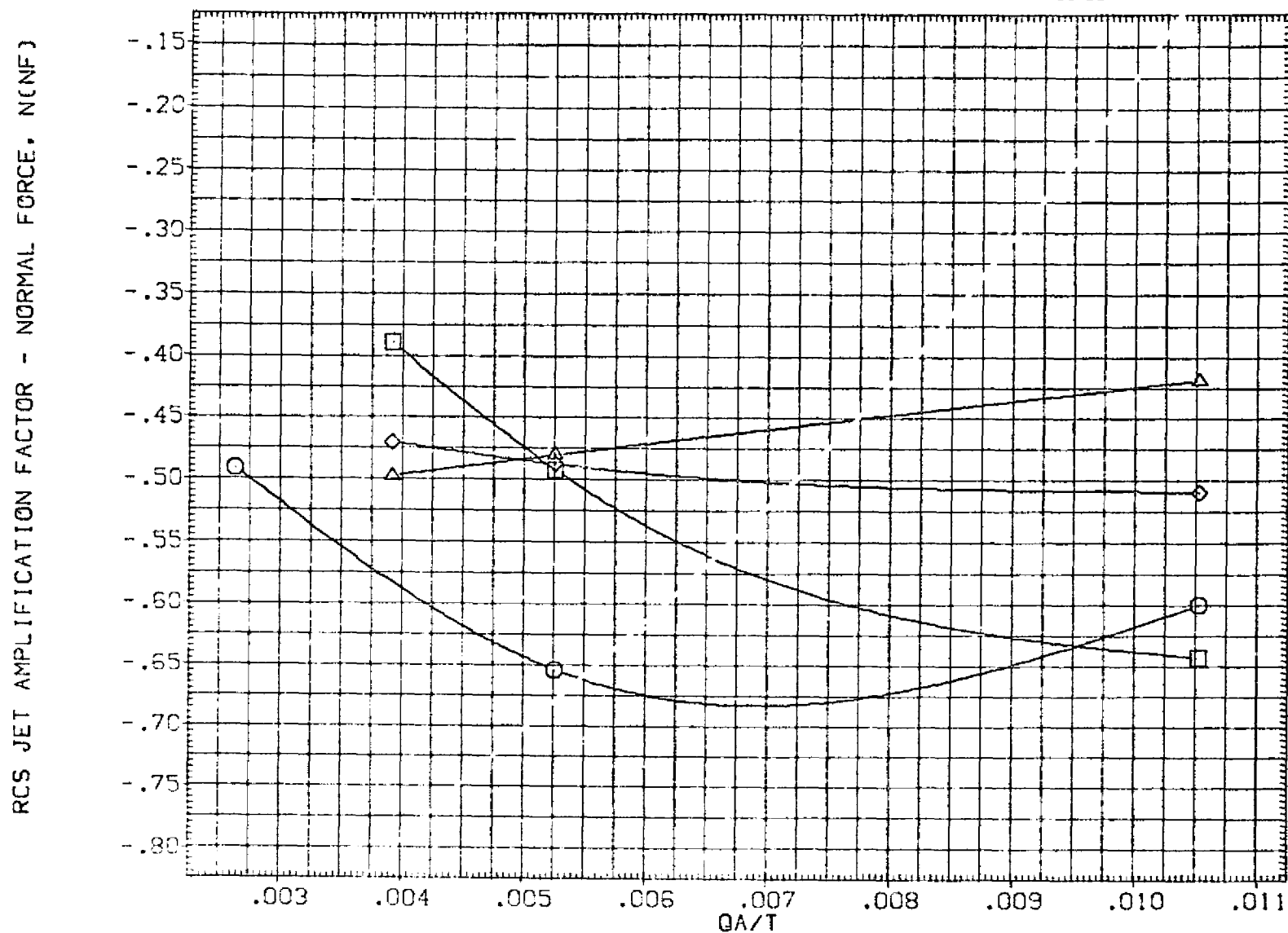


FIGURE 93. AREA RATIO EFFECTS, L/H DOWN FIRING JETS

OMEGA = 25.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA071) □	01N31 LARC CFHT 118 (MA-22)
(SJA072) □	01N34 LARC CFHT 118 (MA-22)
(SJA073) ◇	01N47 LARC CFHT 118 (MA-22)
(SJA074) △	01N43 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BOFLAP	BETA	REFERENCE INFORMATION		
.000	2.000	.000	.000	SREF	2690.0000	ST. T.
.000	2.000	.000	.000	LREF	474.8000	IN. T.
.000	2.000	.000	.000	BREF	936.6800	IN. S
.000	2.000	.000	.000	YMRP	1076.7000	IN. X0
				XMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - NORMAL FORCE. N(NF)

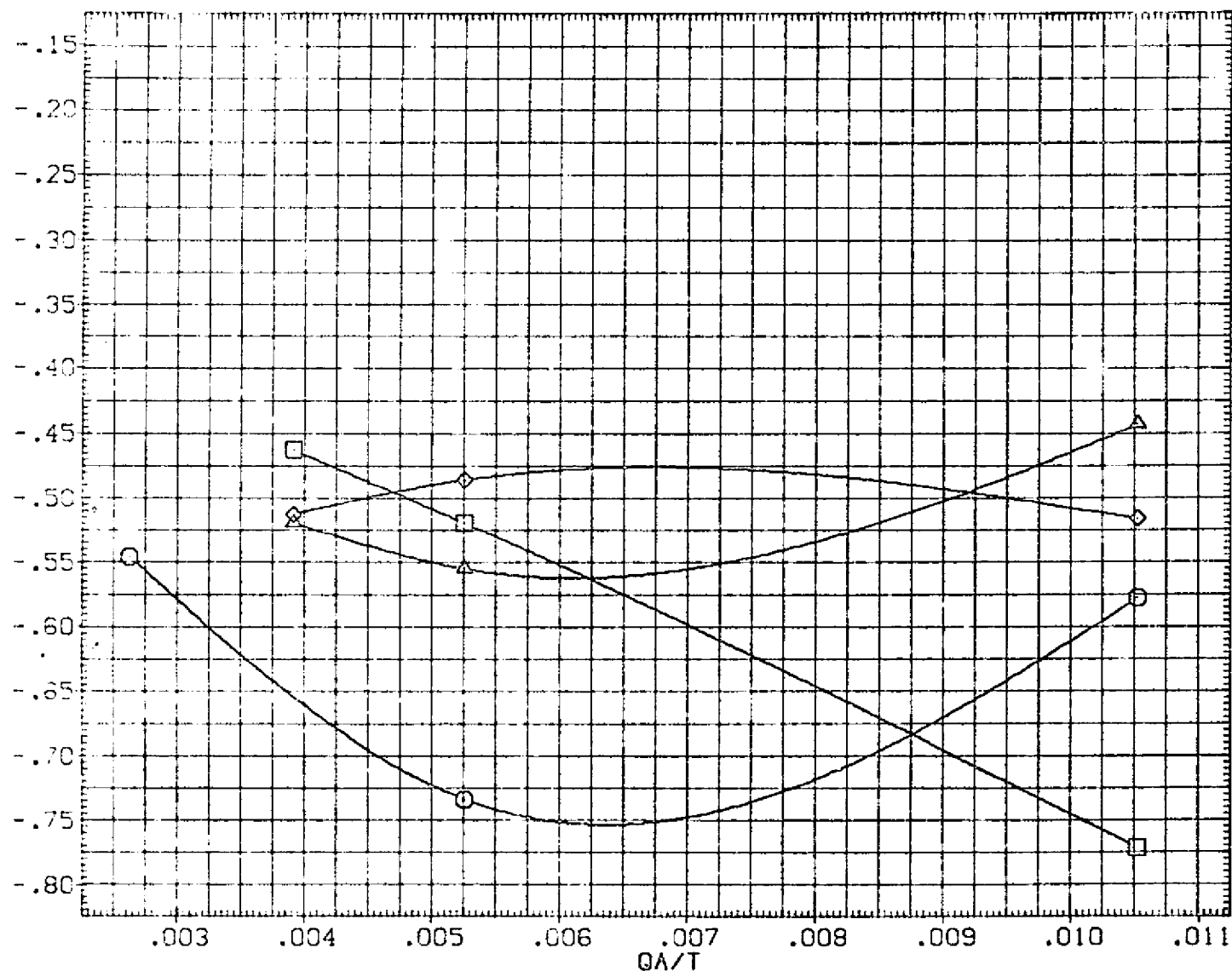


FIGURE 93. AREA RATIO EFFECTS, L/H DOWN FIRING JETS
(N)ALPHA = 30.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA071)	01N31 LARC CFHT 118 (MA-22)
(SJA072)	01N34 LARC CFHT 118 (MA-22)
(SJA073)	01N47 LARC CFHT 118 (MA-22)
(SJA074)	01N43 LARC CFHT 118 (MA-22)

ELEV3N	NO.JET	BDFLAP	BETA	REFERENCE INFORMATION
.000	2.000	.000	.000	SREF 2690.0000 SQ.FT.
.000	2.000	.000	.000	LREF 474.8000 INCHES
.000	2.000	.000	.000	BREF 936.6800 INCHES
.000	2.000	.000	.000	XMRP 1076.7000 IN. X0
				YMRP .0000 IN. Y0
				ZMRP 375.0000 IN. Z0
				SCALE .0100

RCS JET AMPLIFICATION FACTOR - PITCH, N(PM)

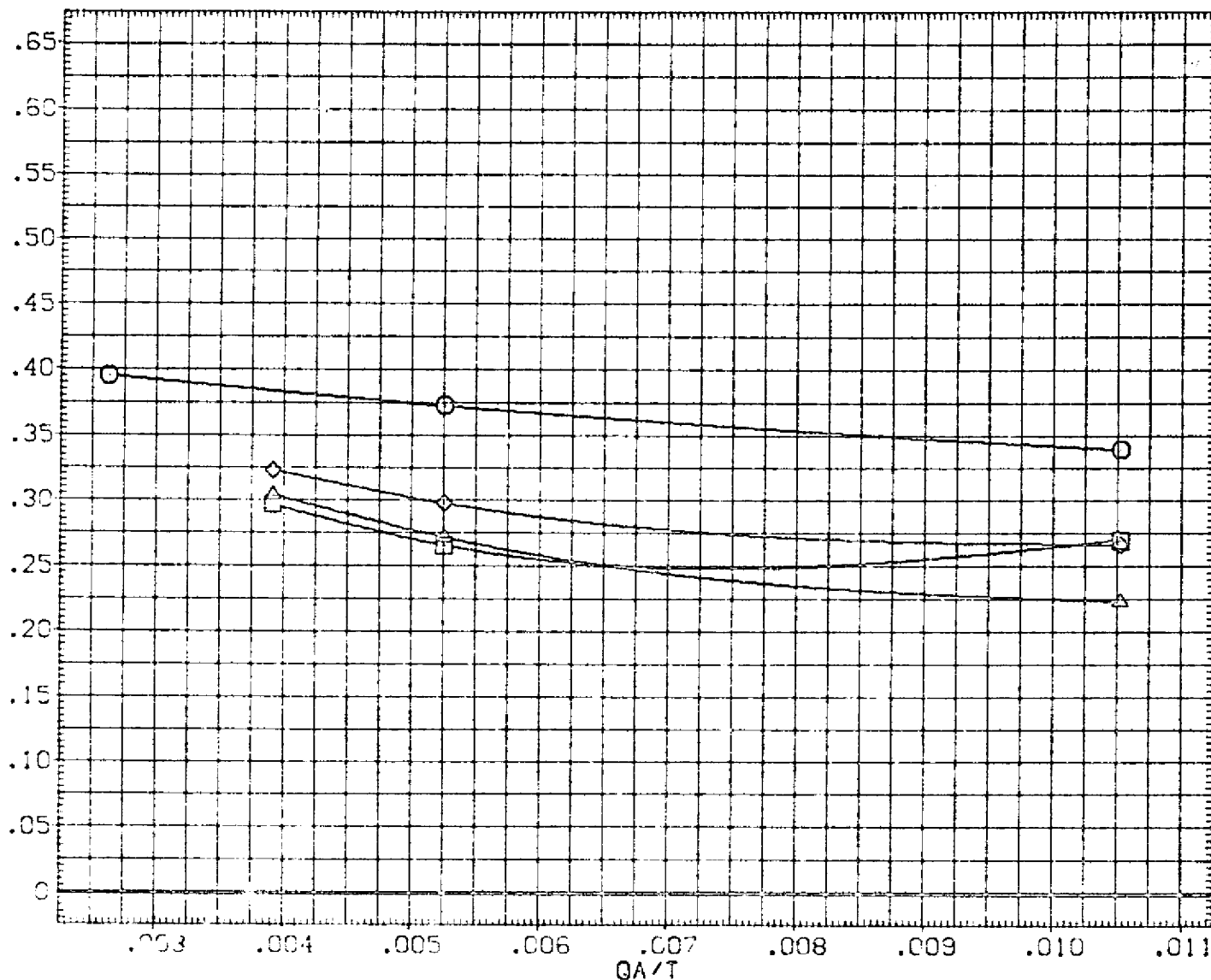


FIGURE 93. AREA RATIO EFFECTS, L/H DOWN FIRING JETS

(α) ALPHA = -8.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA071)	Q1N31 LARC CFHT 118 (MA-22)
(SJA072)	Q1N34 LARC CFHT 118 (MA-22)
(SJA073)	Q1N47 LARC CFHT 118 (MA-22)
(SJA074)	Q1N43 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BD FLAP	BETA	REFERENCE INFORMATION
.000	2.000	.000	.000	SPEF 2690.0000 SQ. FT.
.000	2.000	.000	.000	LREF 474.8000 INCHES
.000	2.000	.000	.000	BREF 946.6800 IN
.000	2.000	.000	.000	WARP 1076.7000 IN. X0
.000	2.000	.000	.000	WARP 1076.7000 IN. Y0
.000	2.000	.000	.000	WARP 1076.7000 IN. Z0
.000	2.000	.000	.000	WARP 1076.7000 IN. Z0

RCS JET AMPLIFICATION FACTOR - PITCH, N(PM)

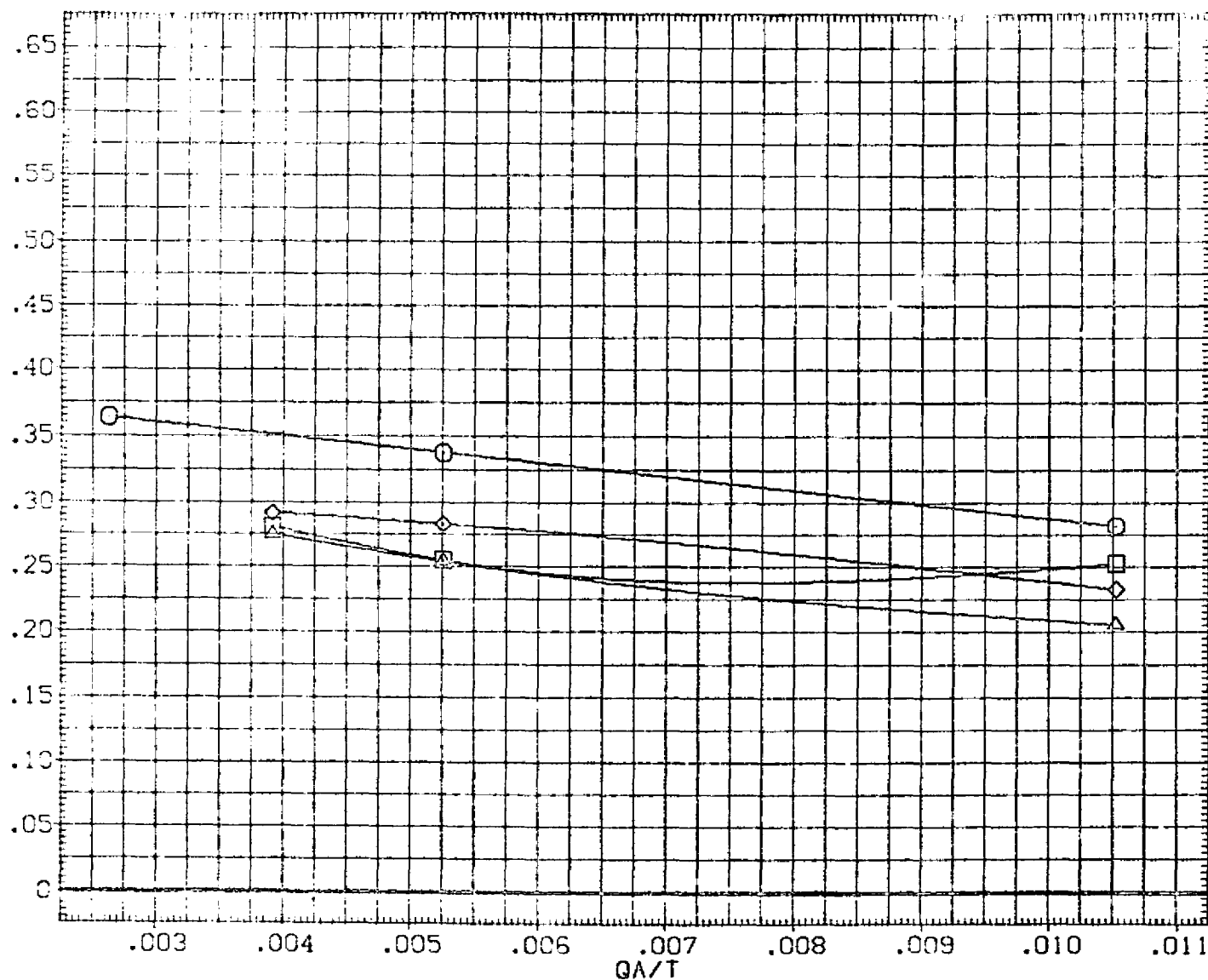


FIGURE 93. AREA RATIO EFFECTS, L/H DOWN FIRING JETS

(B) ALPHA = -6.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA071)	01N31 LARC CFHT 118 (MA-22)
(SJA072)	01N34 LARC CFHT 118 (MA-22)
(SJA073)	01N47 LARC CFHT 118 (MA-22)
(SJA074)	01N43 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	90FLAP	BETA	REFERENCE INFORMATION		
.000	2.000	.000	.000	SREF	2690.0000	SQ. FT.
.000	2.000	.000	.000	LREF	474.8000	INCHES
.030	2.000	.000	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.0100	

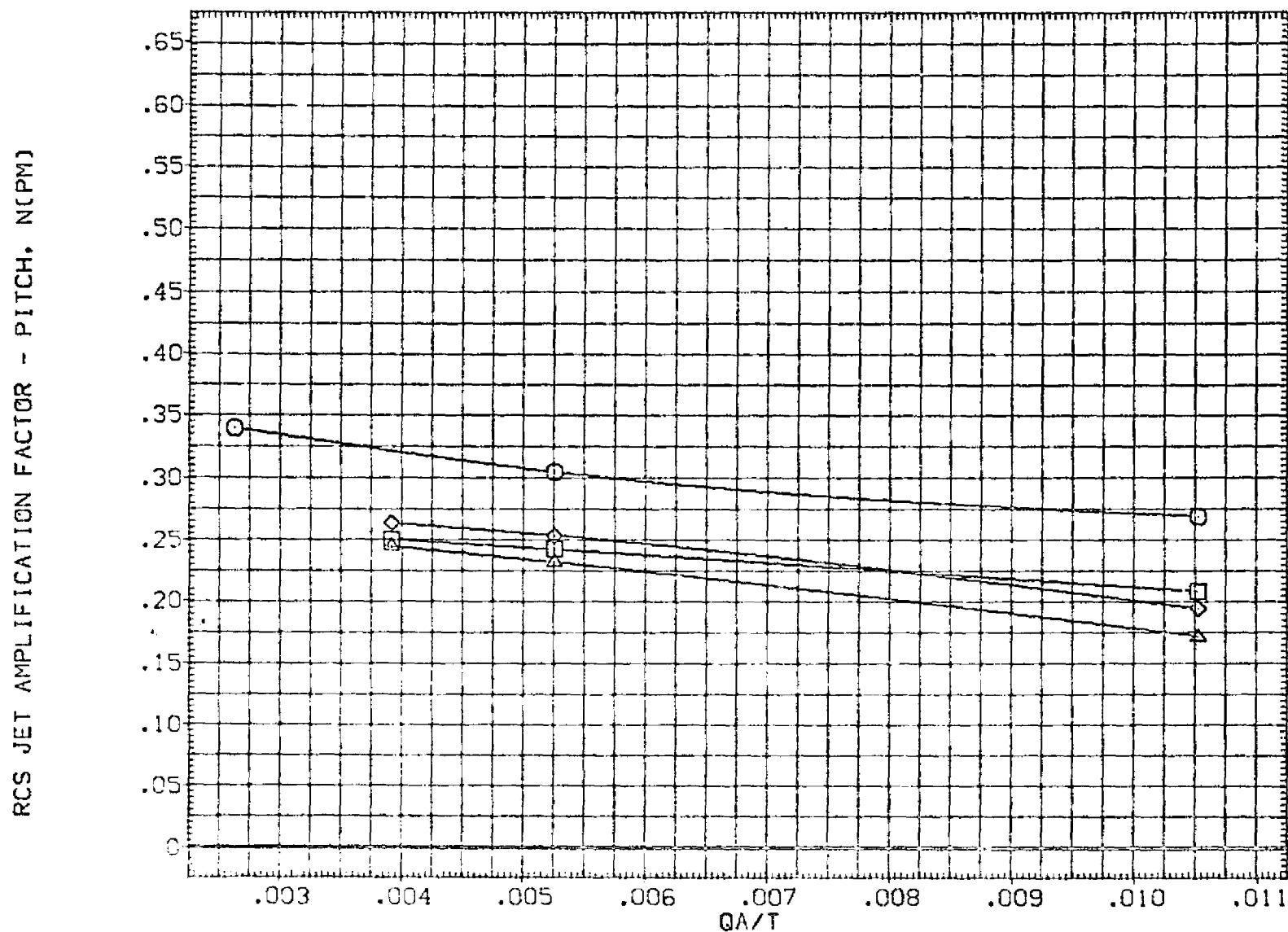


FIGURE 93. AREA RATIO EFFECTS, L/H DOWN FIRING JETS
(C) ALPHA = -4.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA071)	01N31 LARC CFHT 118 (MA-22)
(SJA072)	01N34 LARC CFHT 118 (MA-22)
(SJA073)	01N47 LARC CFHT 118 (MA-22)
(SJA074)	01N43 LARC CFHT 118 (MA-22)

ELEV3N	NOJET	BDFLAP	BETA	REFERENCE INFORMATION		
.000	2.000	.000	.000	SREF	2690.0000	SO.
.000	2.000	.000	.000	LREF	474.8000	INCHES
.000	2.000	.000	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	YMRP	1076.7000	INCHES
				YMRP	.0000	INCHES
				ZMRP	375.0000	INCHES
				SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - PITCH, NCPM)

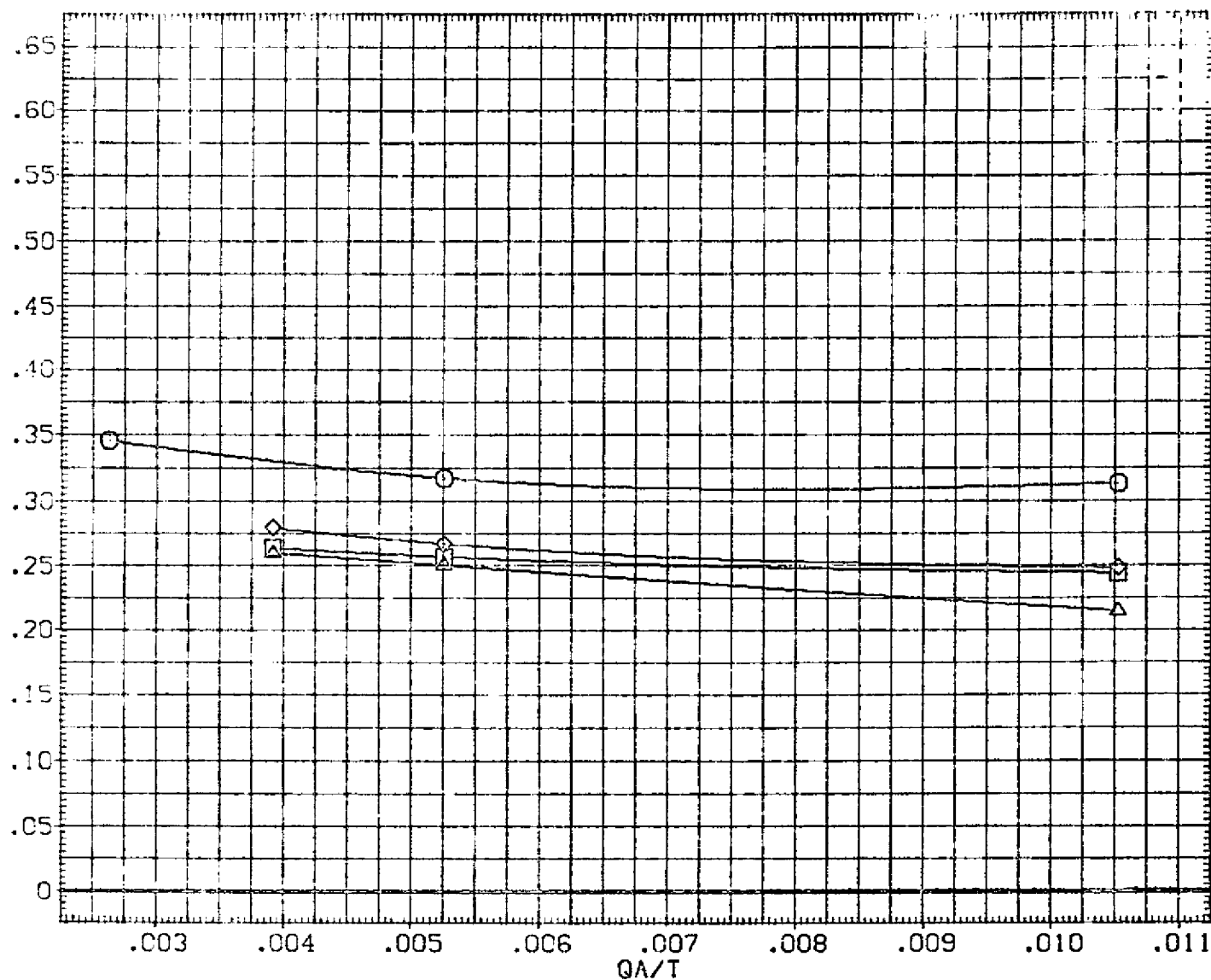


FIGURE 93. AREA RATIO EFFECTS, L/H DOWN FIRING JETS

(D) ALPHA = -2.00

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION
(SJA071)	○	01N31 LARC CFHT 118 (MA-22)
(SJA072)	□	01N34 LARC CFHT 118 (MA-22)
(SJA073)	◇	01N47 LARC CFHT 118 (MA-22)
(SJA074)	△	01N43 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BD FLAP	BETA	REFERENCE INFORMATION		
.000	2.000	.000	.000	SREF	2690.0000	SQ. FT.
.000	2.000	.000	.000	LREF	474.8000	INCHES
.000	2.000	.000	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - PITCH, N(PM)

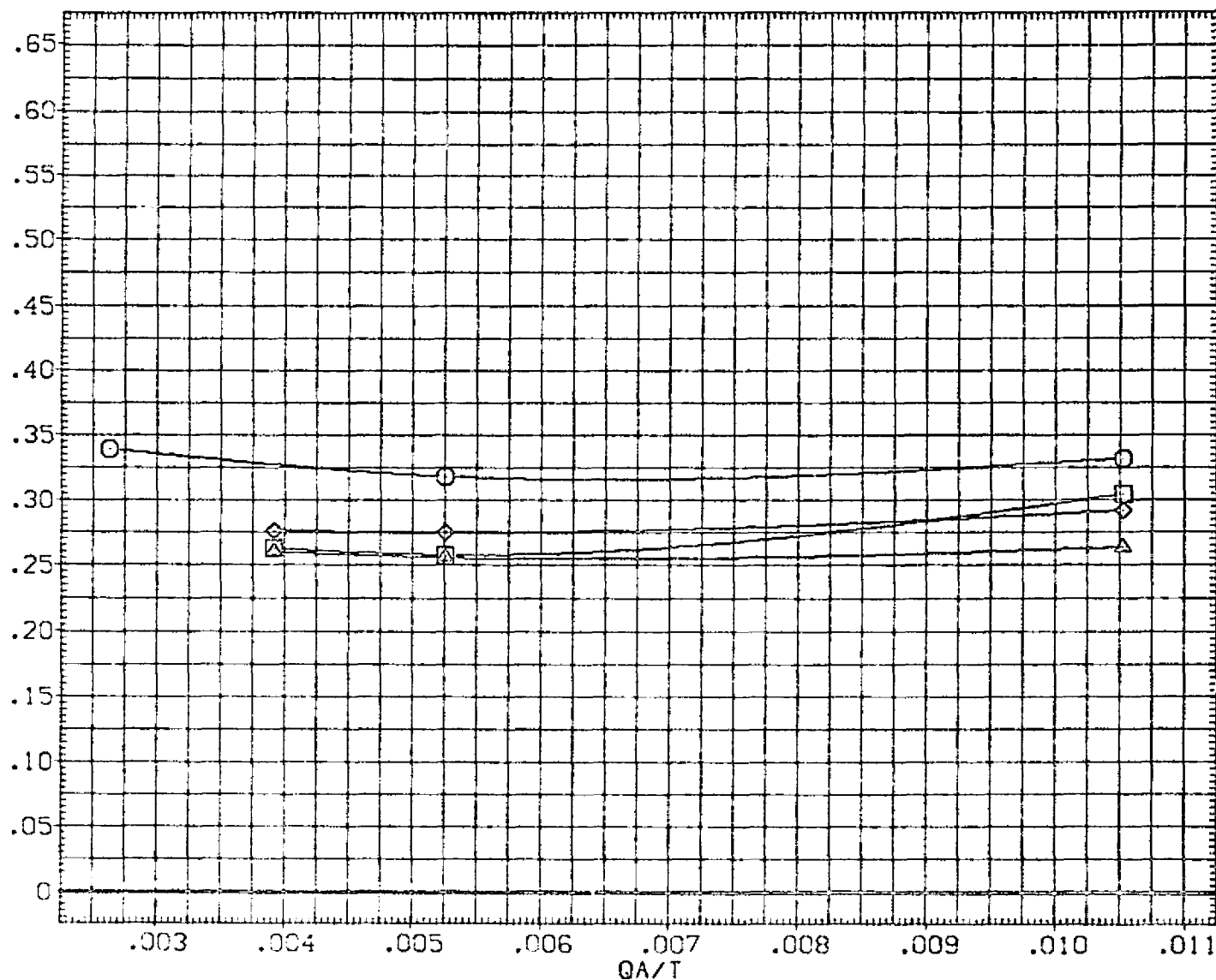


FIGURE 93. AREA RATIO EFFECTS, L/H DOWN FIRING JETS

(CD) ALPHA = .00

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION
(SJA071)	○	GIN31 LARC CFHT 118 (MA-22)
(SJA072)	□	GIN34 LARC CFHT 118 (MA-22)
(SJA073)	◇	GIN47 LARC CFHT 118 (MA-22)
(SJA074)	△	GIN13 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BD FLAP	BETA	REFERENCE INFORMATION
.000	2.000	.000	.000	SREF 2690.0000 50 FT.
.000	2.000	.000	.000	LREF 474.8000 INCHES
.000	2.000	.000	.000	BREF 936.6800 INCHES
.000	2.000	.000	.000	MMRP 1076.7000 IN. YR
				W 0.0000 IN. YR
				P 375.0000 IN. YR
				WE .0100

RCS JET AMPLIFICATION FACTOR - PITCH, N(PM)

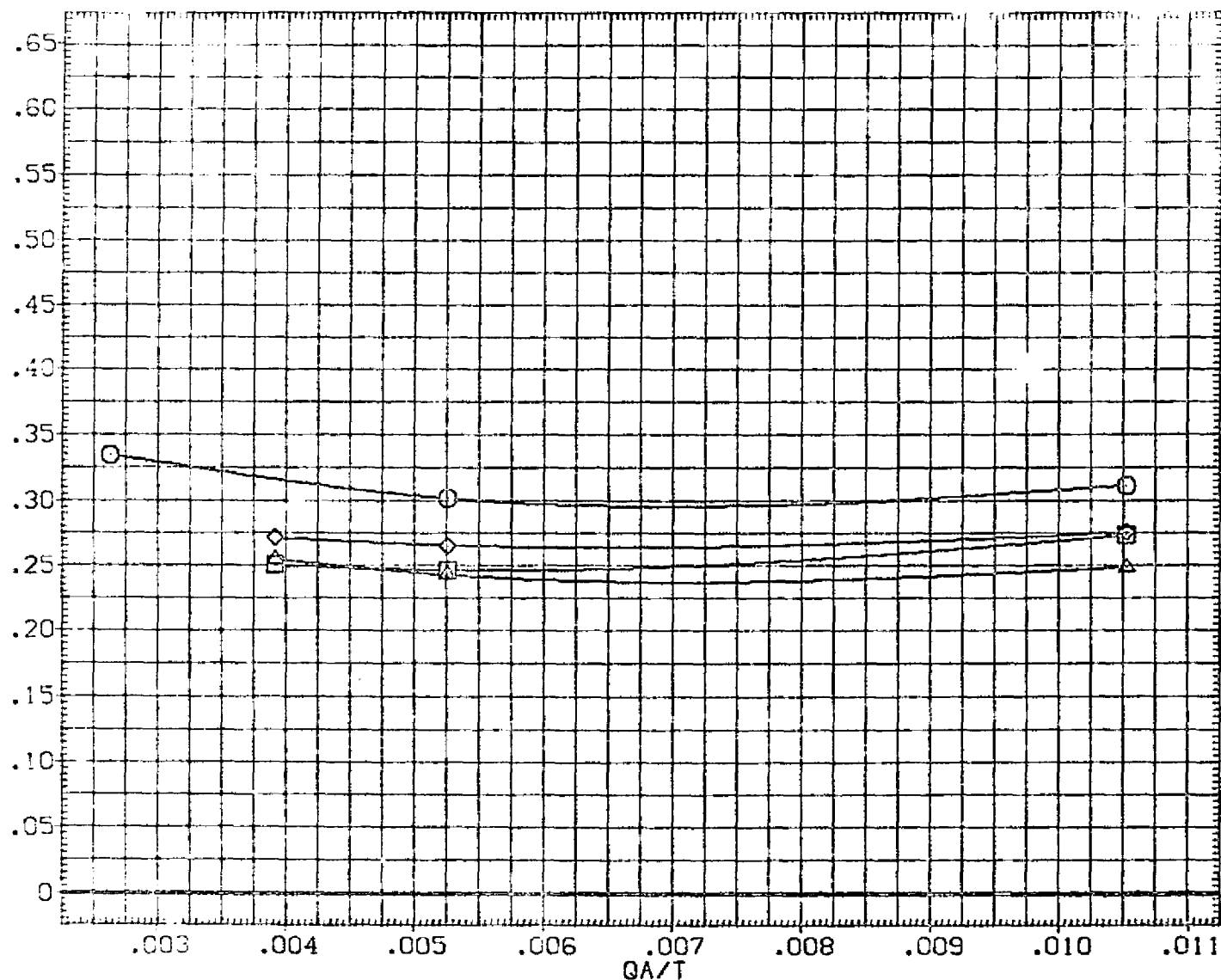


FIGURE 93. AREA RATIO EFFECTS, L/H DOWN FIRING JETS
(F) ALPHA = 2.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA071)	01N31 LARC CFHT 118 (MA-22)
(SJA072)	01N34 LARC CFHT 118 (MA-22)
(SJA073)	01N47 LARC CFHT 118 (MA-22)
(SJA074)	01N43 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BD FLAP	BETA	REFERENCE INFORMATION		
.000	2.000	.000	.000	SREF	2690.0000	SQ. FT.
.000	2.000	.000	.000	LREF	474.8000	INCHES
.000	2.000	.000	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - PITCH, NCPM

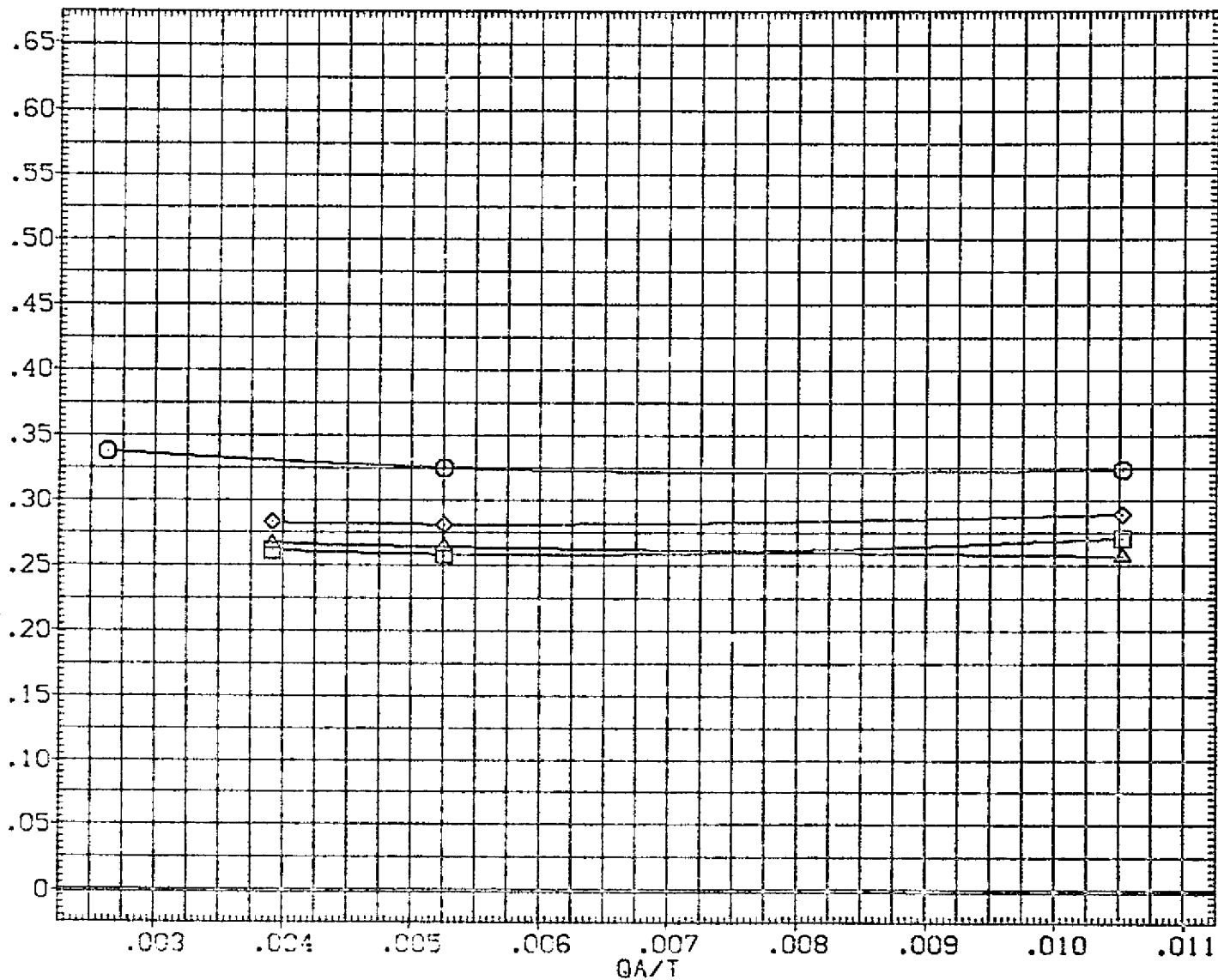


FIGURE 93. AREA RATIO EFFECTS, L/H DOWN FIRING JETS

(G) ALPHA = 4.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA071)	01N31 LARC CFHT 118 (MA-22)
(SJA072)	01N34 LARC CFHT 118 (MA-22)
(SJA073)	01N47 LARC CFHT 118 (MA-22)
(SJA074)	01N43 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BOFLAP	BETA	REFERENCE INFORMATION		
.000	2.000	.000	.000	SREF	2640.0000	90. FT.
.000	2.000	.000	.000	LREF	474.8000	100. IN.
.000	2.000	.000	.000	BREF	935.6800	100. IN.
.000	2.000	.000	.000	MRP	1076.7000	100. IN.
.000	2.000	.000	.000	MRP	.0000	100. IN.
.000	2.000	.000	.000	MRP	375.0000	100. IN.
				SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - PITCH, N(PM)

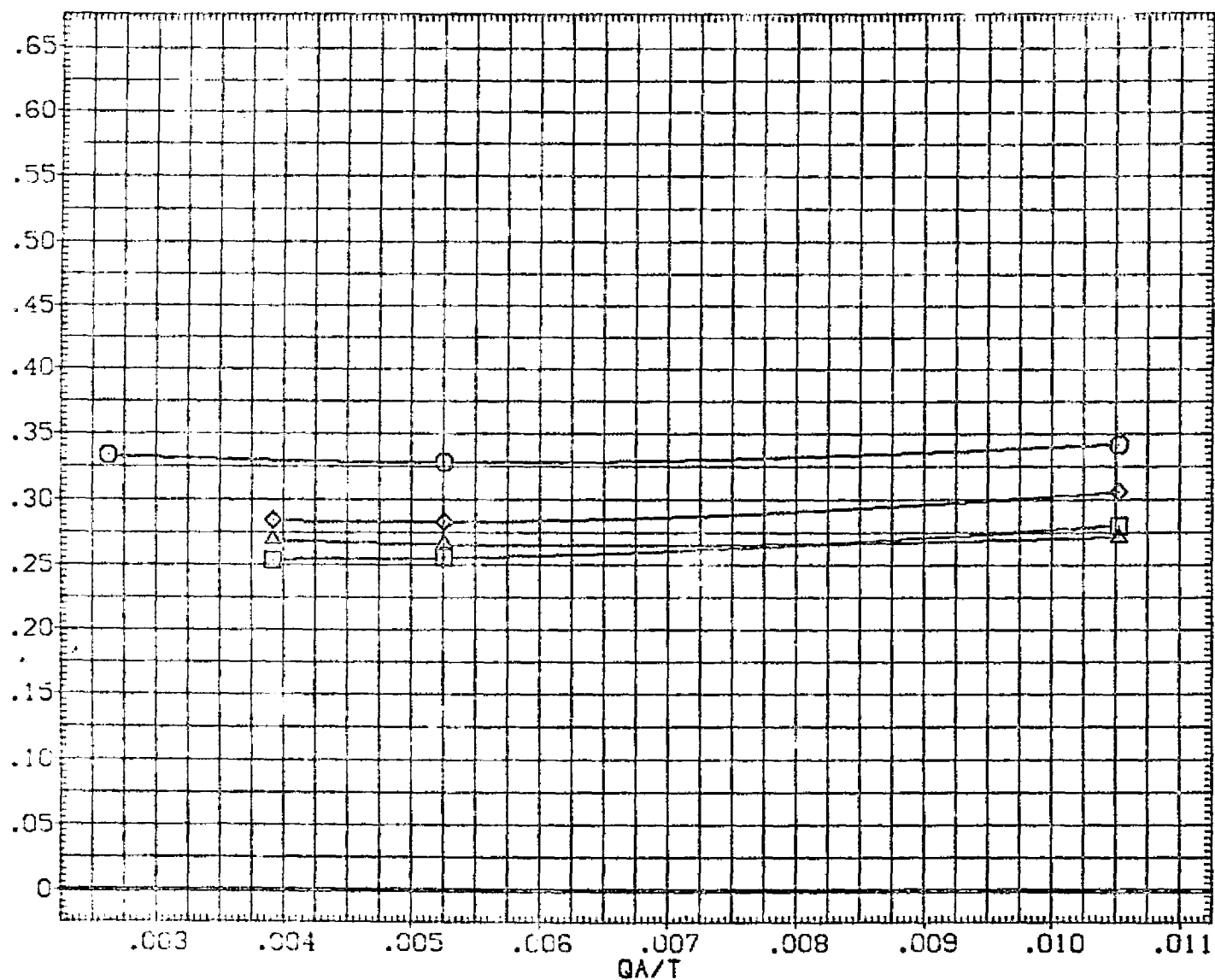


FIGURE 93. AREA RATIO EFFECTS, L/H DOWN FIRING JETS

(H) ALPHA = 6.00

RCS JET AMPLIFICATION FACTOR - PITCH, N(PM)

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	NO. JET	BOFLAP	BETA	REFERENCE INFORMATION		
01N33	LARC CFHT 118 (MA-22)	.000	2.000	.000	.000	SREF	2690.0000	SQ. FT.
01N34	LARC CFHT 118 (MA-22)	.000	2.000	.000	.000	LREF	474.8000	INCHES
01N35	LARC CFHT 118 (MA-22)	.000	2.000	.000	.000	BREF	936.6800	INCHES
01N45	LARC CFHT 118 (MA-22)	.000	2.000	.000	.000	XMRP	1076.7000	IN. XO
						YMRP	.0000	IN. YO
						ZMRP	375.0000	IN. ZO
						SCALE	.0100	

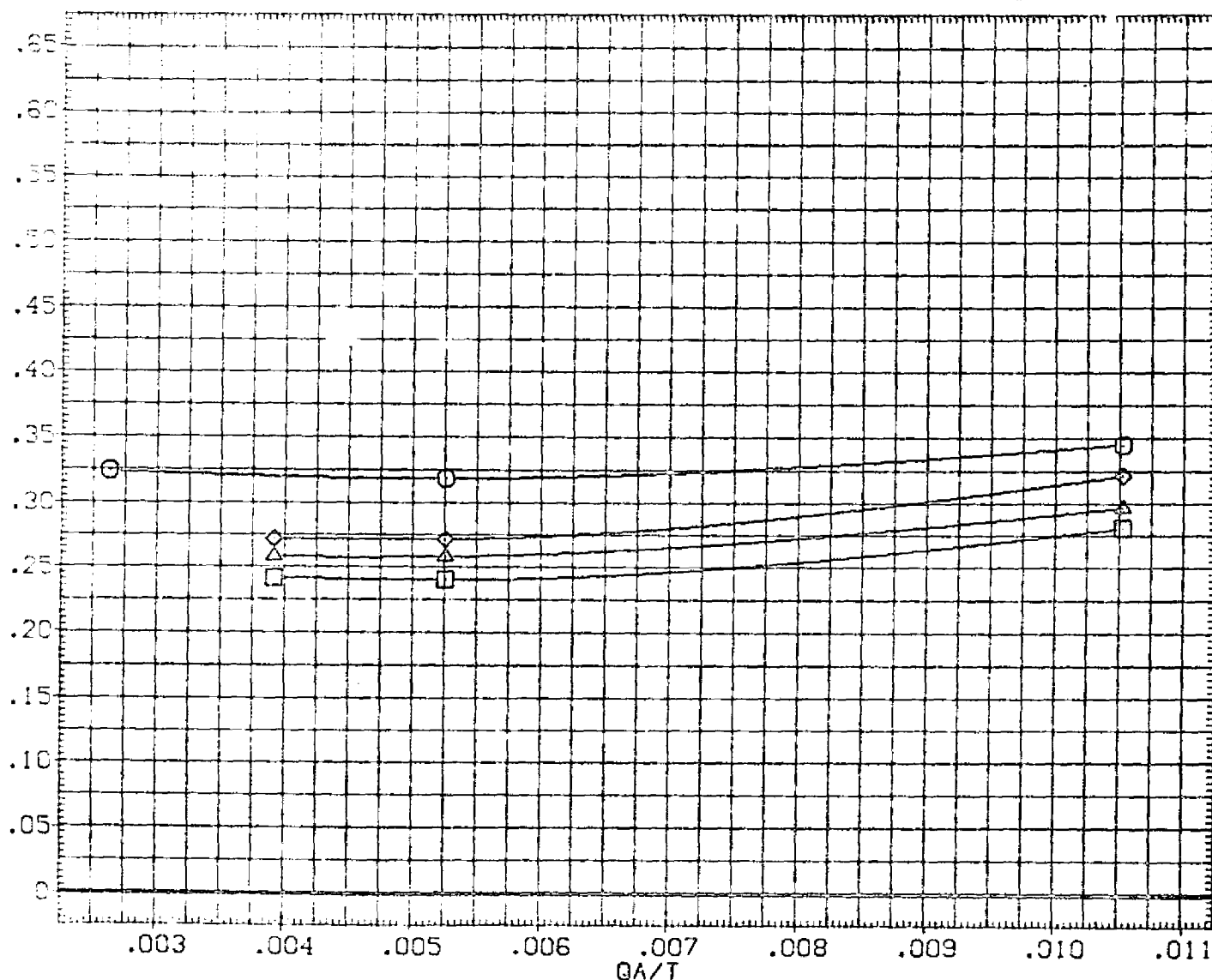


FIGURE 93. AREA RATIO EFFECTS, L/H DOWN FIRING JETS
(1) ALPHA = 8.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA071) ○	01N31 LARC CFHT 118 (MA-22)
(SJA072) □	01N34 LARC CFHT 118 (MA-22)
(SJA073) ◇	01N47 LARC CFHT 118 (MA-22)
(SJA074) △	01N43 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BOFLAP	BETA	REFERENCE INFORMATION		
.000	2.000	.000	.000	SREF	2890.0000	53. FT.
.000	2.000	.000	.000	LREF	474.9000	INC. 45
.000	2.000	.000	.000	RREF	936.6800	INC. 45
.000	2.000	.000	.000	MRP	1076.7000	IN. X0
				MRP	.0000	IN. Y0
				MRP	375.0000	IN. Z0
				SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - PITCH, N(PM)

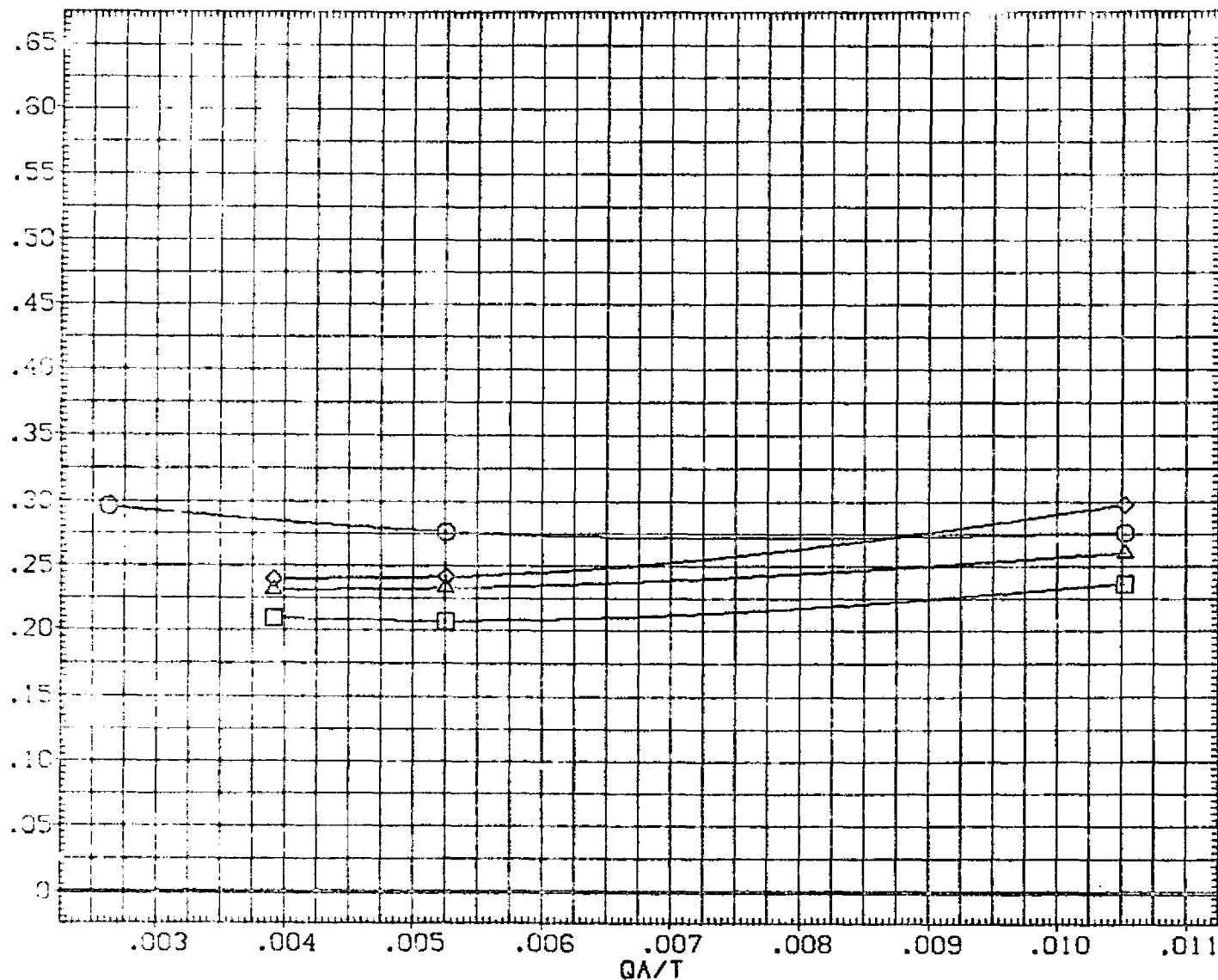


FIGURE 93. AREA RATIO EFFECTS, L/H DOWN FIRING JETS

(J) ALPHA = 10.00

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION
(SJA071)	○	GIN31 LARC CFHT 118 (MA-22)
(SJA072)	□	GIN34 LARC CFHT 118 (MA-22)
(SJA073)	△	GIN47 LARC CFHT 118 (MA-22)
(SJA074)	◇	GIN43 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BOFLAP	BETA	REFERENCE INFORMATION		
.000	2.000	.000	.000	SREF	2690.0000	50. FT.
.000	2.000	.000	.000	LREF	474.8000	INCHES
.000	2.000	.000	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - PITCH, N(PM)

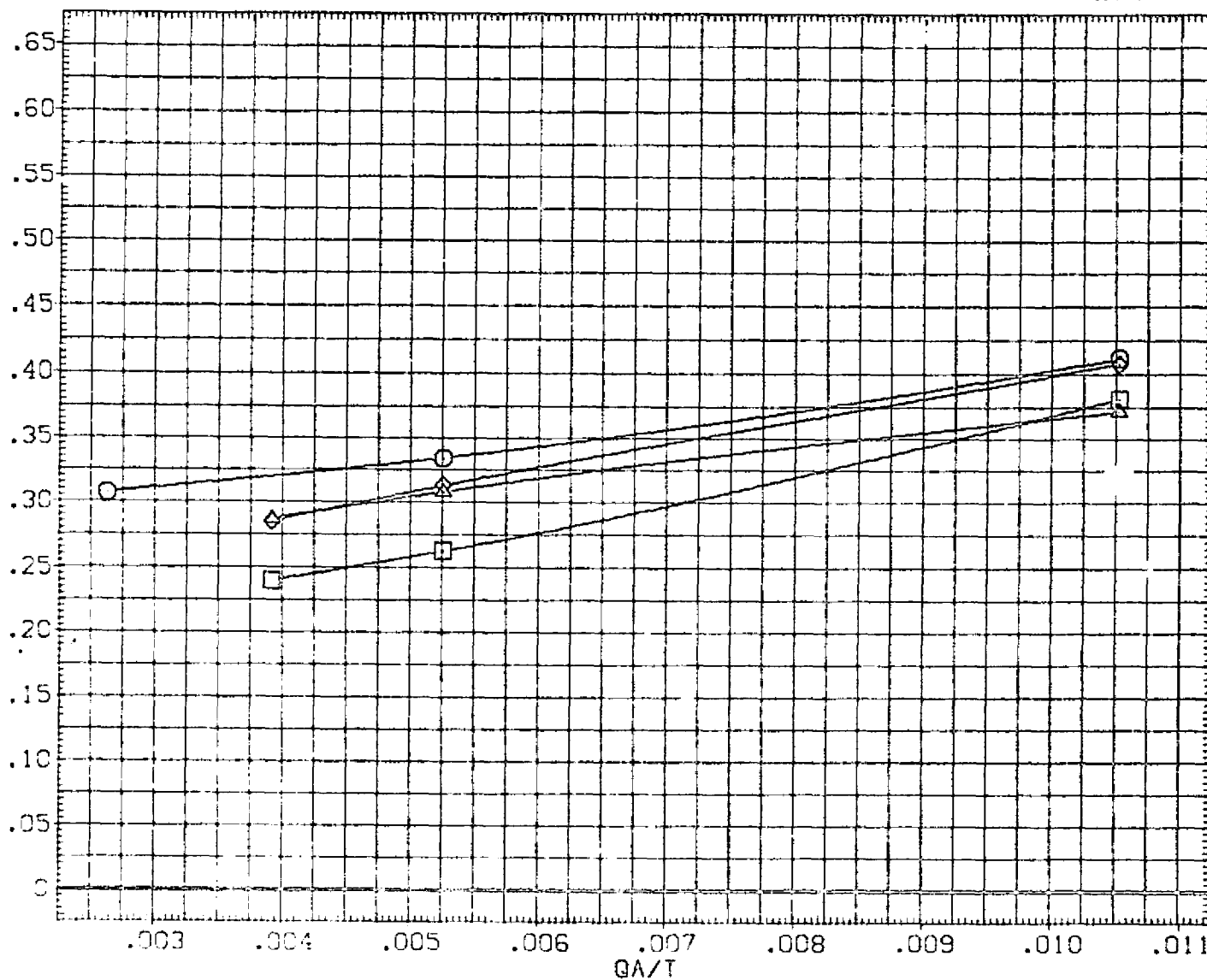


FIGURE 93. AREA RATIO EFFECTS, L/H DOWN FIRING JETS

(K) ALPHA = 15.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
01A071	01N31 LARC CFHT 118 (MA-22)
01A072	01N34 LARC CFHT 118 (MA-22)
01A073	01N47 LARC CFHT 118 (MA-22)
01A074	01N43 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BOFLAP	BETA	REFERENCE INFORMATION
.000	2.000	.000	.000	SREF 2690.0000 SCALF
.000	2.000	.000	.000	LREF 474.8000 INCHES
.000	2.000	.000	.000	SREF 936.6800 INCHES
.000	2.000	.000	.000	SREF 1076.7000 INCHES
				MRP .0000 INCHES
				MRP 375.0000 INCHES
				SCALE 0100

RCS JET AMPLIFICATION FACTOR - PITCH, N(PM)

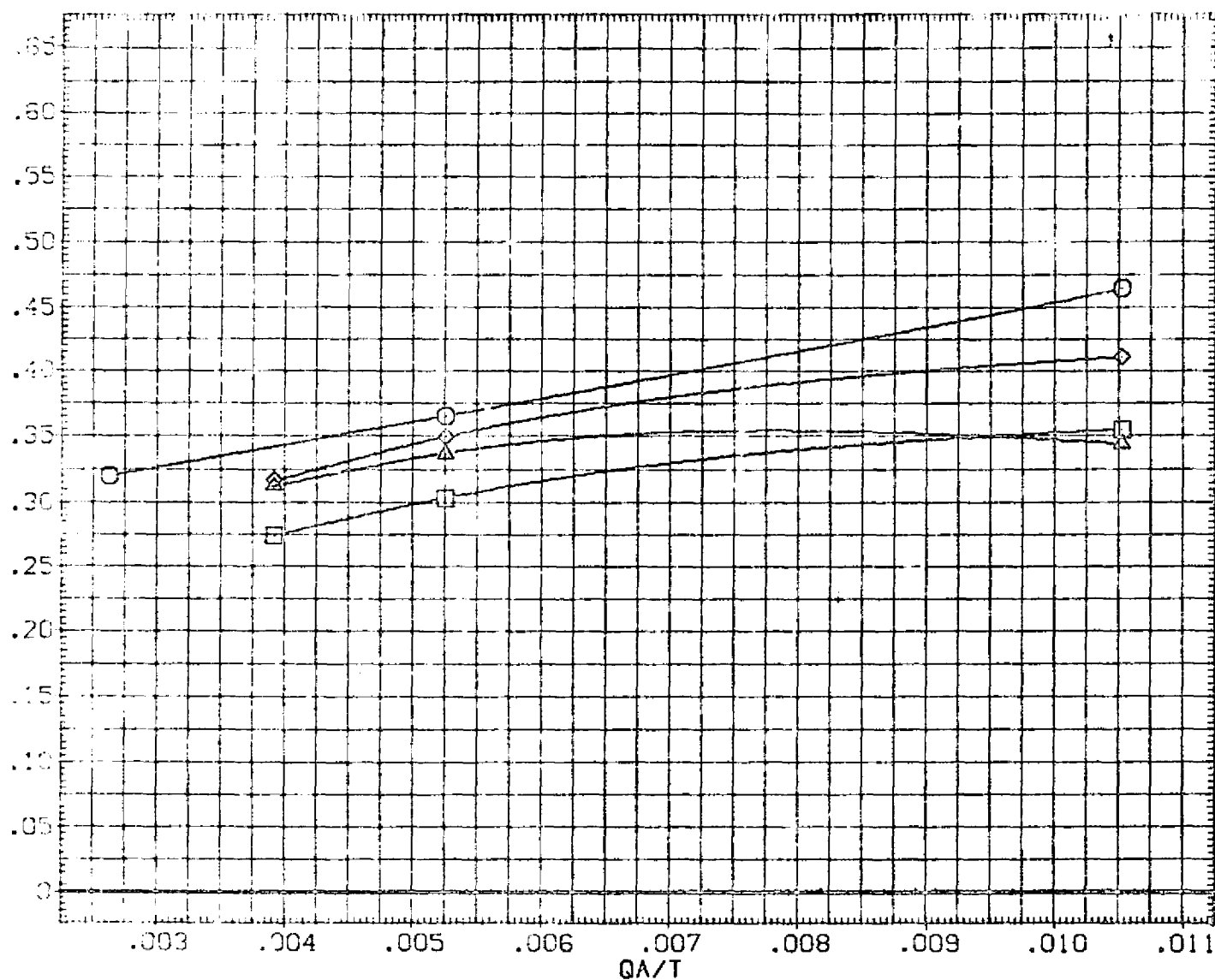


FIGURE 93. AREA RATIO EFFECTS, L/H DOWN FIRING JETS

(L) ALPHA = 20.00

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	NO. JET	BD FLAP	BETA	REFERENCE INFORMATION		
(SJA071)	○	Q1N31 LARC CFHT 118 (MA-22)	.000	2.000	.000	.000	SREF	2690.0000	50.FT.
(SJA072)	◇	Q1N34 LARC CFHT 118 (MA-22)	.000	2.000	.000	.000	LREF	474.8000	INCHES
(SJA073)	△	Q1N47 LARC CFHT 118 (MA-22)	.000	2.000	.000	.000	BREF	936.6800	INCHES
(SJA074)	□	Q1N43 LARC CFHT 118 (MA-22)	.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
							YMRP	.0000	IN. Y0
							ZMRP	375.0000	IN. Z0
							SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - PITCH, N(PM)

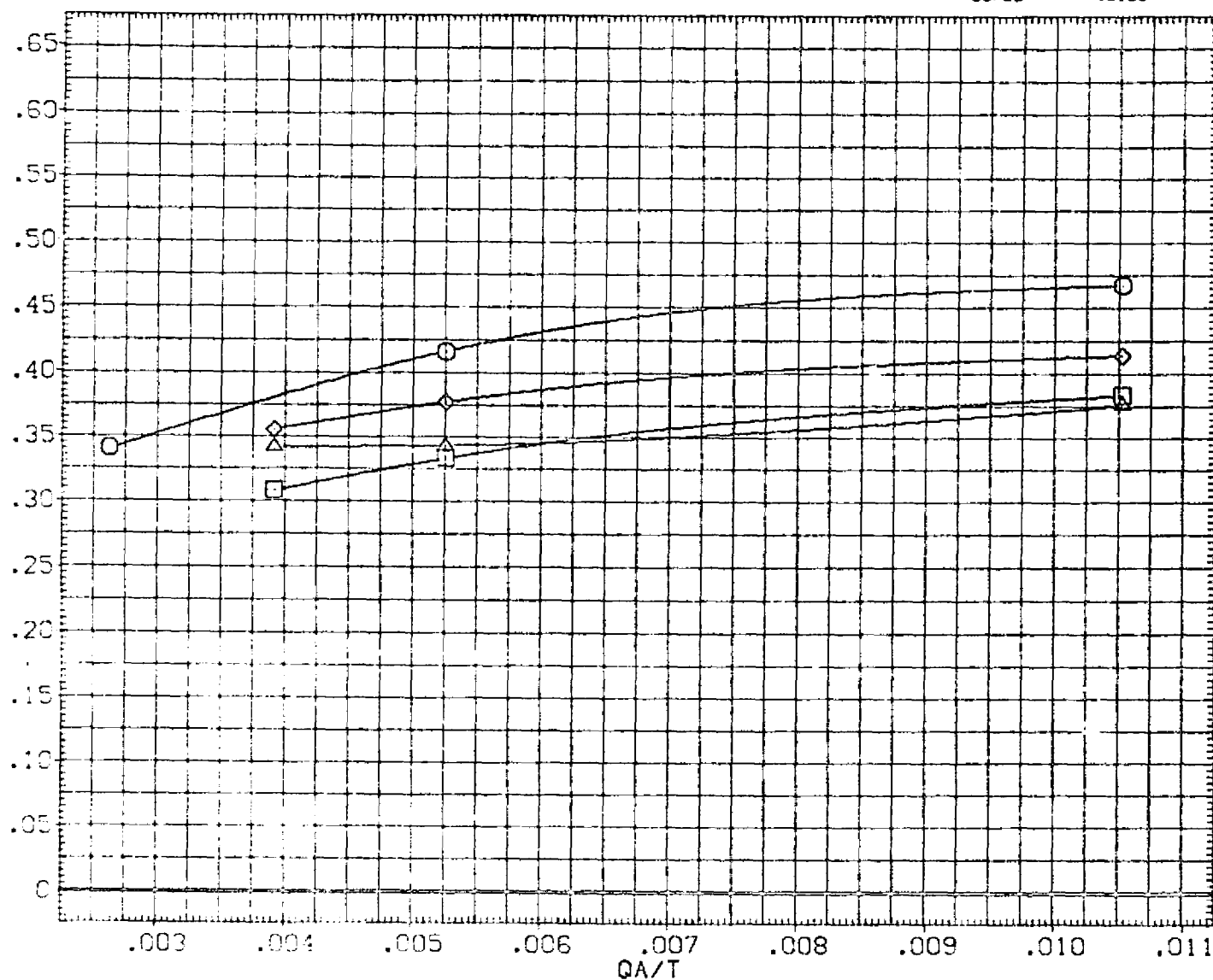


FIGURE 93. AREA RATIO EFFECTS, L/H DOWN FIRING JETS
(M) ALPHA = 25.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
01N31	CFHT 118 (MA-22)
01N34	CFHT 118 (MA-22)
01N47	CFHT 118 (MA-22)
01N43	CFHT 118 (MA-22)

ELEVON	NO. JET	BDFLAP	BETA	REFERENCE INFORMATION
.000	2.000	.000	.000	SREF 2600.0000 SQ. FT.
.000	2.000	.000	.000	LREF 404.0000 INCHES
.000	2.000	.000	.000	BREF 406.6800 INCHES
.000	2.000	.000	.000	XMRP 1076.7000 IN. YD
				YMRP .0000 IN. YD
				ZMRP 175.0000 IN. ZD
				SCALE .0100

RCS JET AMPLIFICATION FACTOR - PITCH, N(PM)

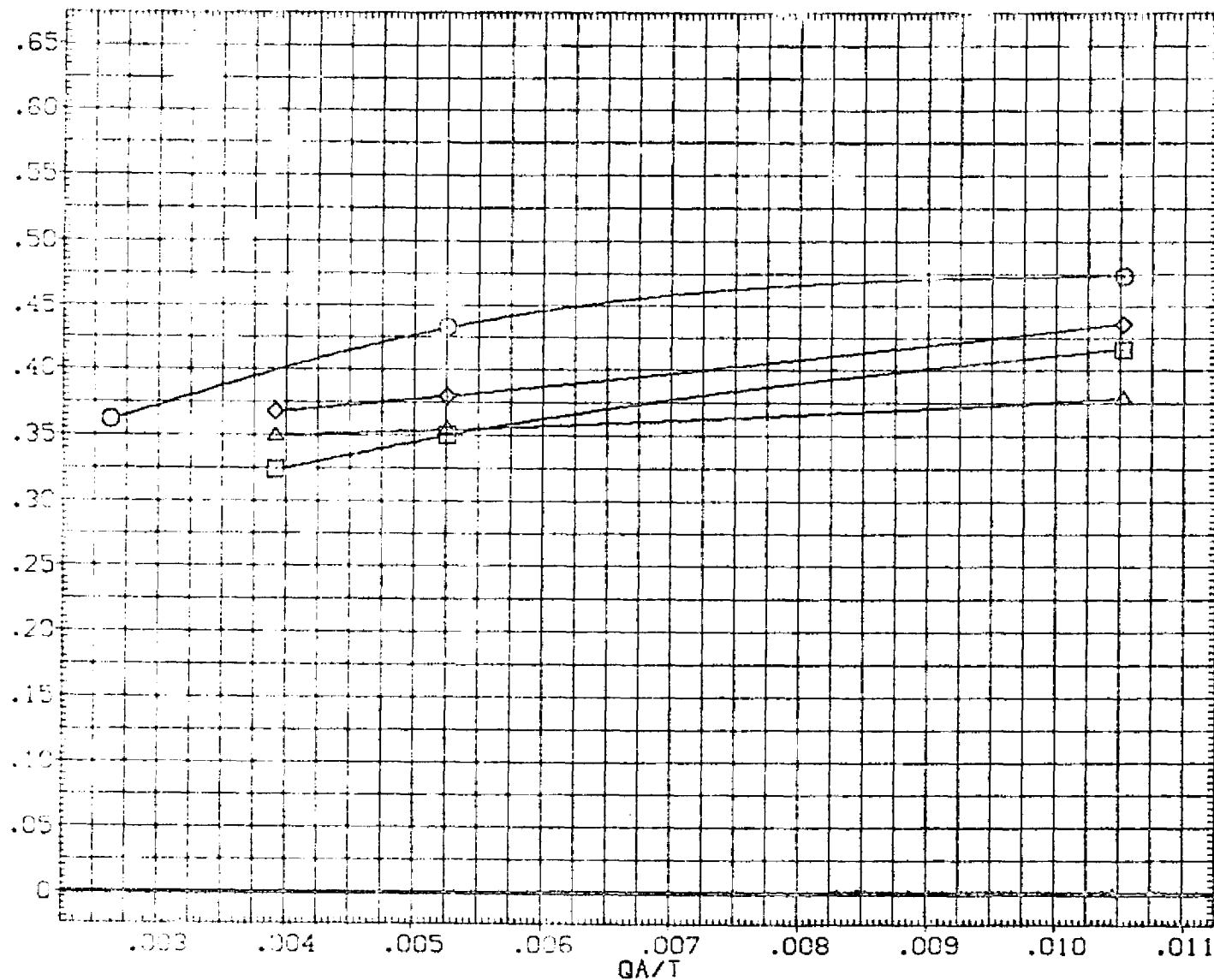


FIGURE 93. AREA RATIO EFFECTS, L/H DOWN FIRING JETS

(NDALPHA = 30.00)

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	NO. JET	BD FLAP	BETA	REFERENCE INFORMATION	
(SJA071)	QIN31 LARC CFHT 118 (MA-22)	.000	2.000	.000	.000	SREF	2690.0000 SQ. FT.
(SJA072)	QIN34 LARC CFHT 118 (MA-22)	.000	2.000	.000	.000	LREF	474.8000 INCHES
(SJA073)	QIN47 LARC CFHT 118 (MA-22)	.000	2.000	.000	.000	BREF	936.6800 INCHES
(SJA074)	QIN43 LARC CFHT 118 (MA-22)	.000	2.000	.000	.000	XMRP	1076.7000 IN. X0
						YMRP	.0000 IN. Y0
						ZMRP	375.0000 IN. Z0
						SCALE	.0100

RCS JET AMPLIFICATION FACTOR - AXIAL FORCE, N(AF)

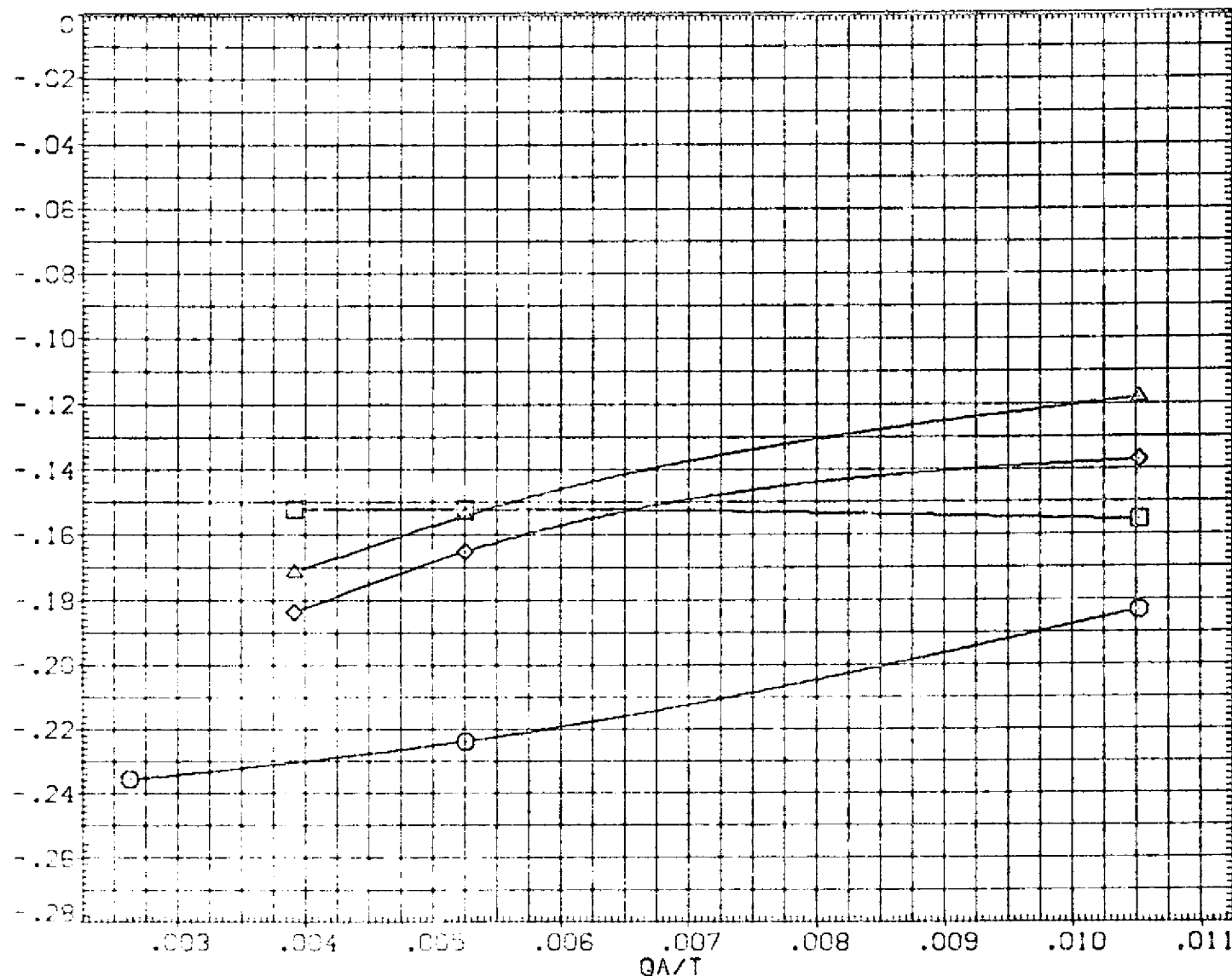


FIGURE 93. AREA RATIO EFFECTS, L/H DOWN FIRING JETS

(A) ALPHA = 18.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
010713	01031 LARC CFT 118 (MA-22)
010723	01031 LARC CFT 118 (MA-22)
010733	01047 LARC CFT 118 (MA-22)
010743	01043 LARC CFT 118 (MA-22)

ELEVON	NO. JET	BD FLAP	BETA	REFERENCE INFORMATION
.000	2.000	.000	.000	SREF 2690.0000 SQ. FT.
.000	2.000	.000	.000	LREF 474.8000 INCH
.000	2.000	.000	.000	BREF 335.6800 INCH
.000	2.000	.000	.000	MRP 376.7000 INCH
.000	2.000	.000	.000	MRP 375.0000 INCH
.000	2.000	.000	.000	SCALE .0100

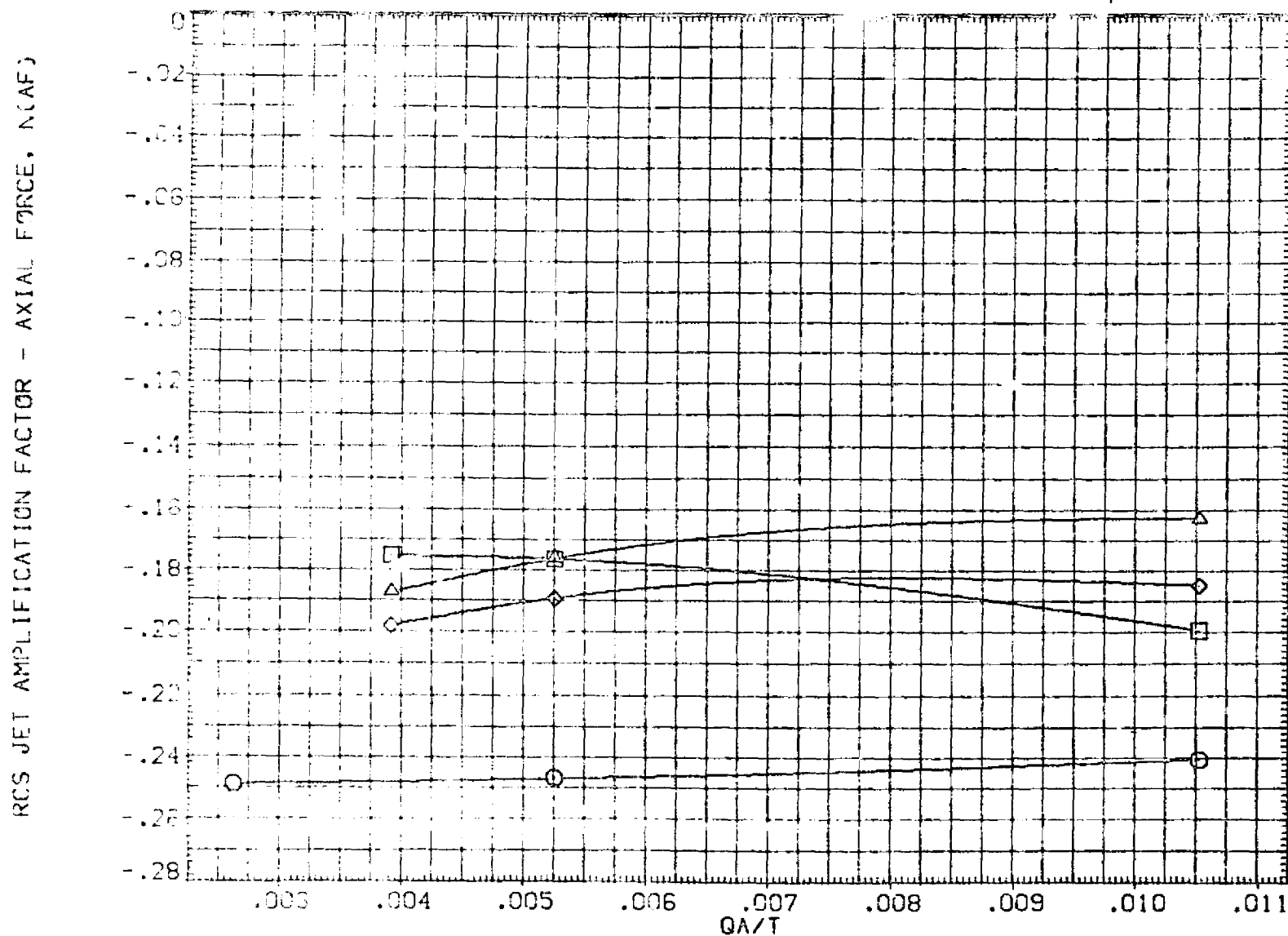


FIGURE 93. AREA RATIO EFFECTS, L/H DOWN FIRING JETS
(B) ALPHA = -6.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	NO.JET	BDFLAP	BETA	REFERENCE INFORMATION	
(SJA071)	01N31 LARC CFHT 118 (MA-22)	.000	2.000	.000	.000	SREF	2690.0000 SQ.FT.
(SJA072)	01N34 LARC CFHT 118 (MA-22)	.000	2.000	.000	.000	LREF	474.8000 INCHES
(SJA073)	01N47 LARC CFHT 118 (MA-22)	.000	2.000	.000	.000	BREF	936.6800 INCHES
(SJA074)	01N43 LARC CFHT 118 (MA-22)	.000	2.000	.000	.000	XMRP	1076.7000 IN. X0
						YMRP	.0000 IN. Y0
						ZMRP	375.0000 IN. Z0
						SCALE	.0100

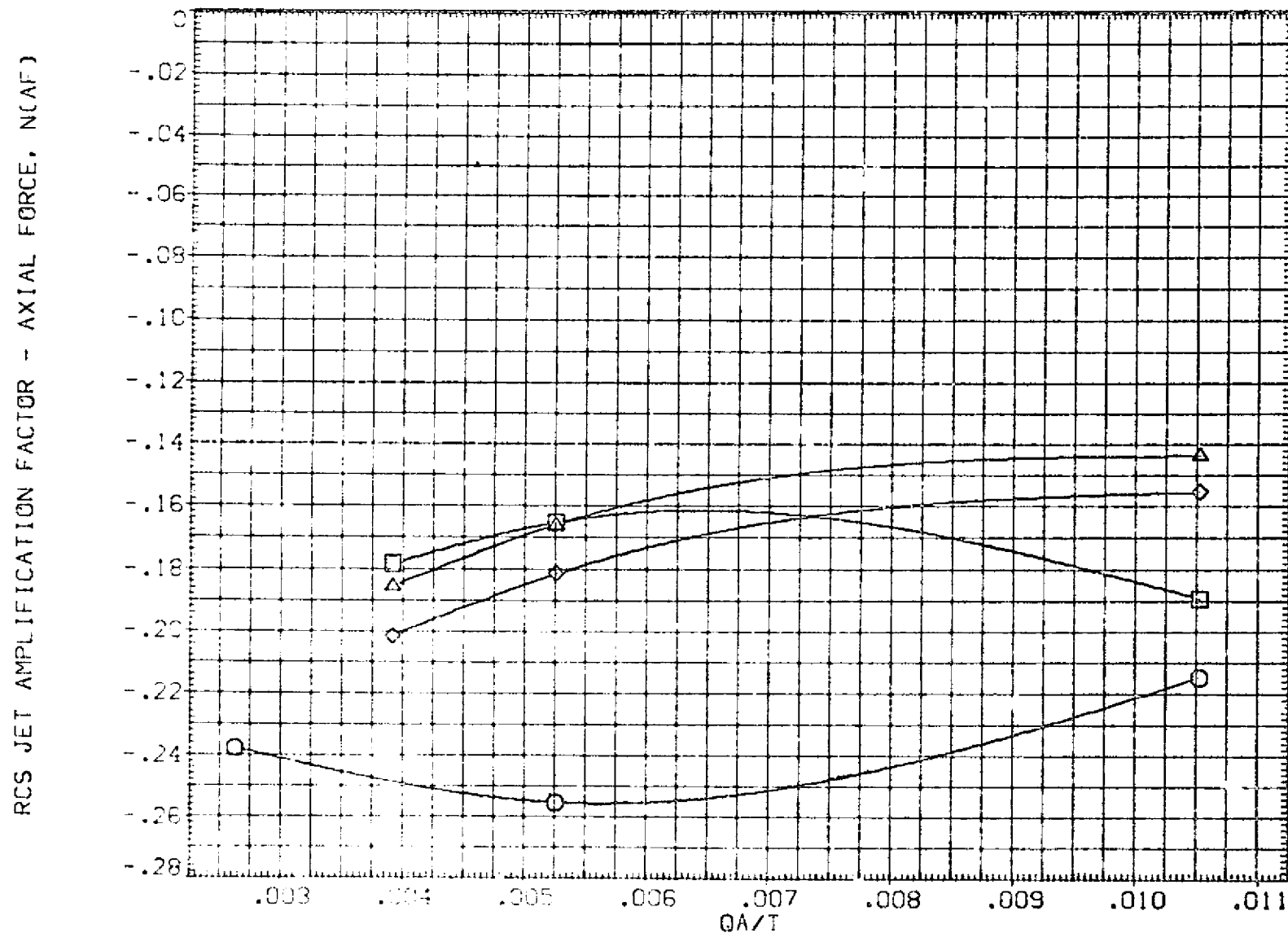


FIGURE 93. AREA RATIO EFFECTS, L/H DOWN FIRING JETS

(CO) ALPHA = -4.00

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION
SCA071	□	01N31 LARC CPHT 118 (MA-22)
SCA072	□	01N34 LARC CPHT 118 (MA-22)
SCA073	◇	01N47 LARC CPHT 118 (MA-22)
SCA074	△	01N43 LARC CPHT 118 (MA-22)

ELEVON	NO. JET	BD FLAP	BETA	REFERENCE INFORMATION
.000	2.000	.000	.000	SREF 2690.0000 SQ. FT.
.000	2.000	.000	.000	LREF 474.8000 INCHES
.000	2.000	.000	.000	RREF 936.8800 IN. X0
.000	2.000	.000	.000	MRP 1076.7000 IN. Y0
.000	2.000	.000	.000	MRP .0000 IN. Y0
.000	2.000	.000	.000	MRP 375.0000 IN. Y0
.000	2.000	.000	.000	SCALE .0100

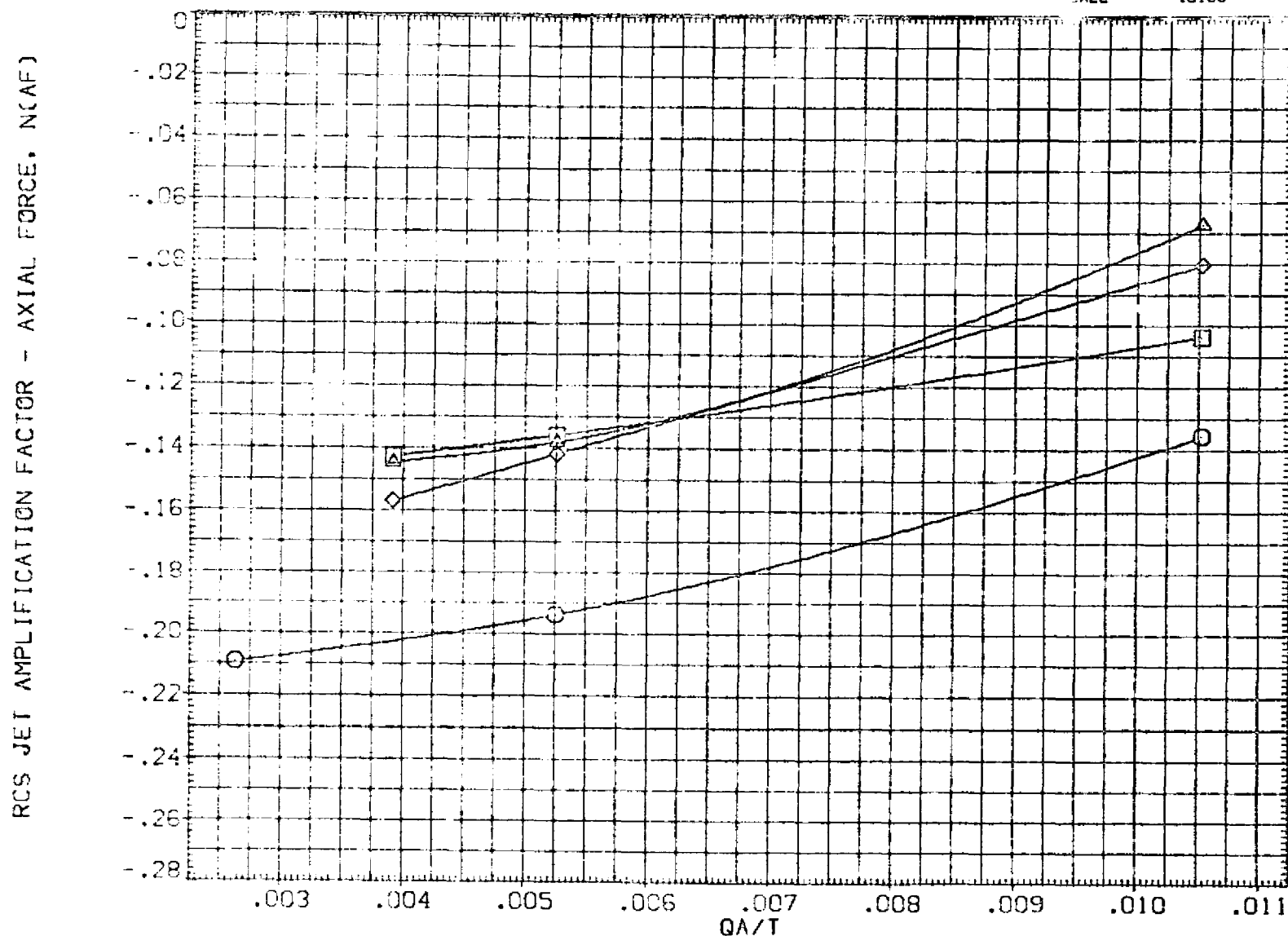


FIGURE 93. AREA RATIO EFFECTS, L/H DOWN FIRING JETS

(D) ALPHA = -2.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	NO. JET	90FLAP	BETA	REFERENCE INFORMATION		
(SJA071)	Q1N31 LARC CFHT 118 (MA-22)	.000	2.000	.000	.000	SREF	2650.0000	SQ.FT.
(SJA072)	Q1N34 LARC CFHT 118 (MA-22)	.000	2.000	.000	.000	LREF	474.8000	INCHES
(SJA073)	Q1N47 LARC CFHT 118 (MA-22)	.000	2.000	.000	.000	BREF	936.6800	INCHES
(SJA074)	Q1N43 LARC CFHT 118 (MA-22)	.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
						YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0100	

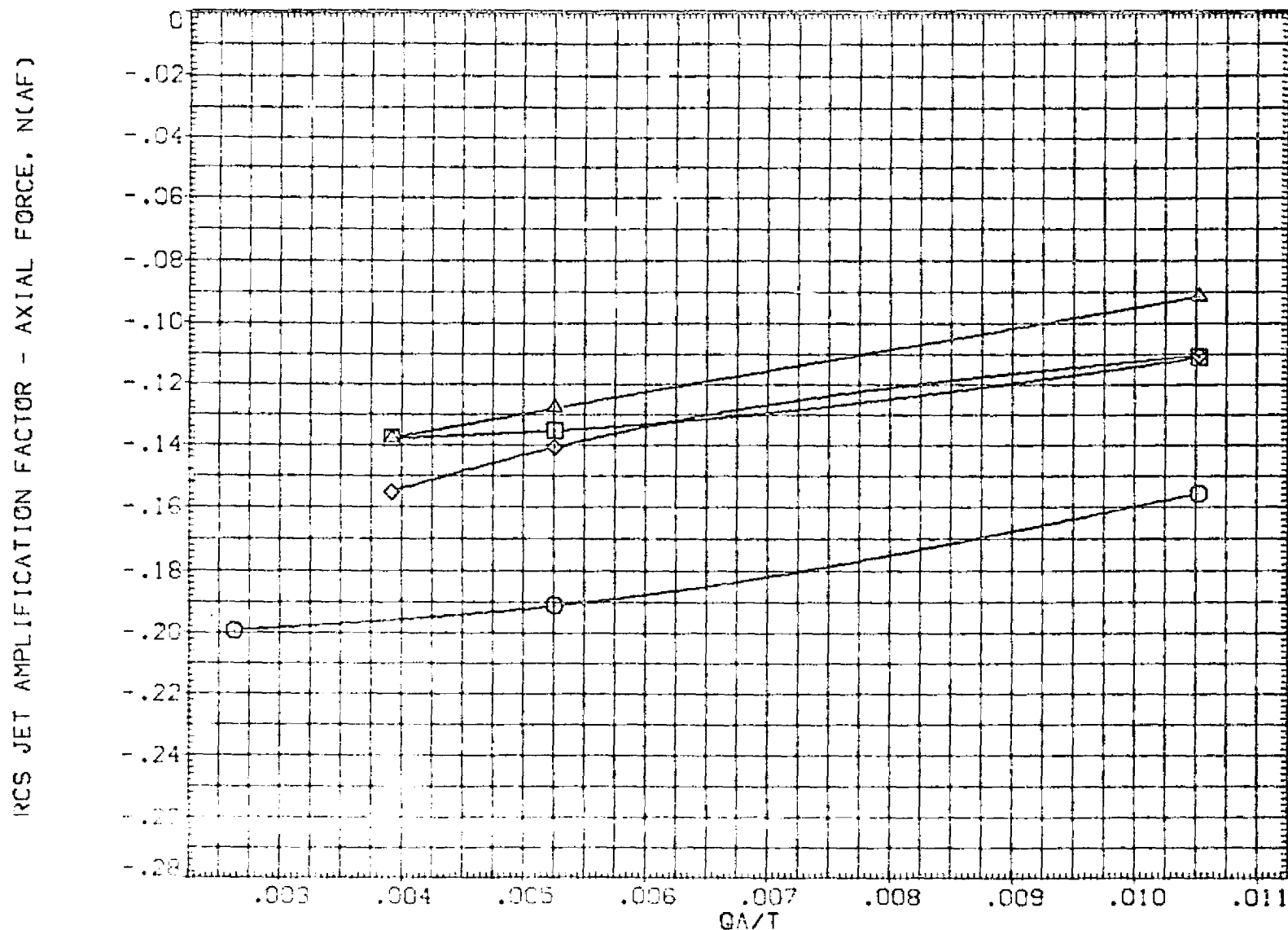


FIGURE 93. AREA RATIO EFFECTS. L/H DOWN FIRING JETS

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	NO. JET	BD FLAP	BETA	REFERENCE INFORMATION	
(SJA071)	QIN31 LARC CFHT 118 (MA-22)	.000	2.000	.000	.000	SREF	2690.0000
(SJA072)	QIN34 LARC CFHT 118 (MA-22)	.000	2.000	.000	.000	LREF	474.8000
(SJA073)	QIN47 LARC CFHT 118 (MA-22)	.000	2.000	.000	.000	BREF	936.6800
(SJA074)	QIN43 LARC CFHT 118 (MA-22)	.000	2.000	.000	.000	RP	1076.7000
						RP	.0000
						RP	375.0000
						SCALE	.0000

RCS JET AMPLIFICATION FACTOR - AXIAL FORCE, N(AF)

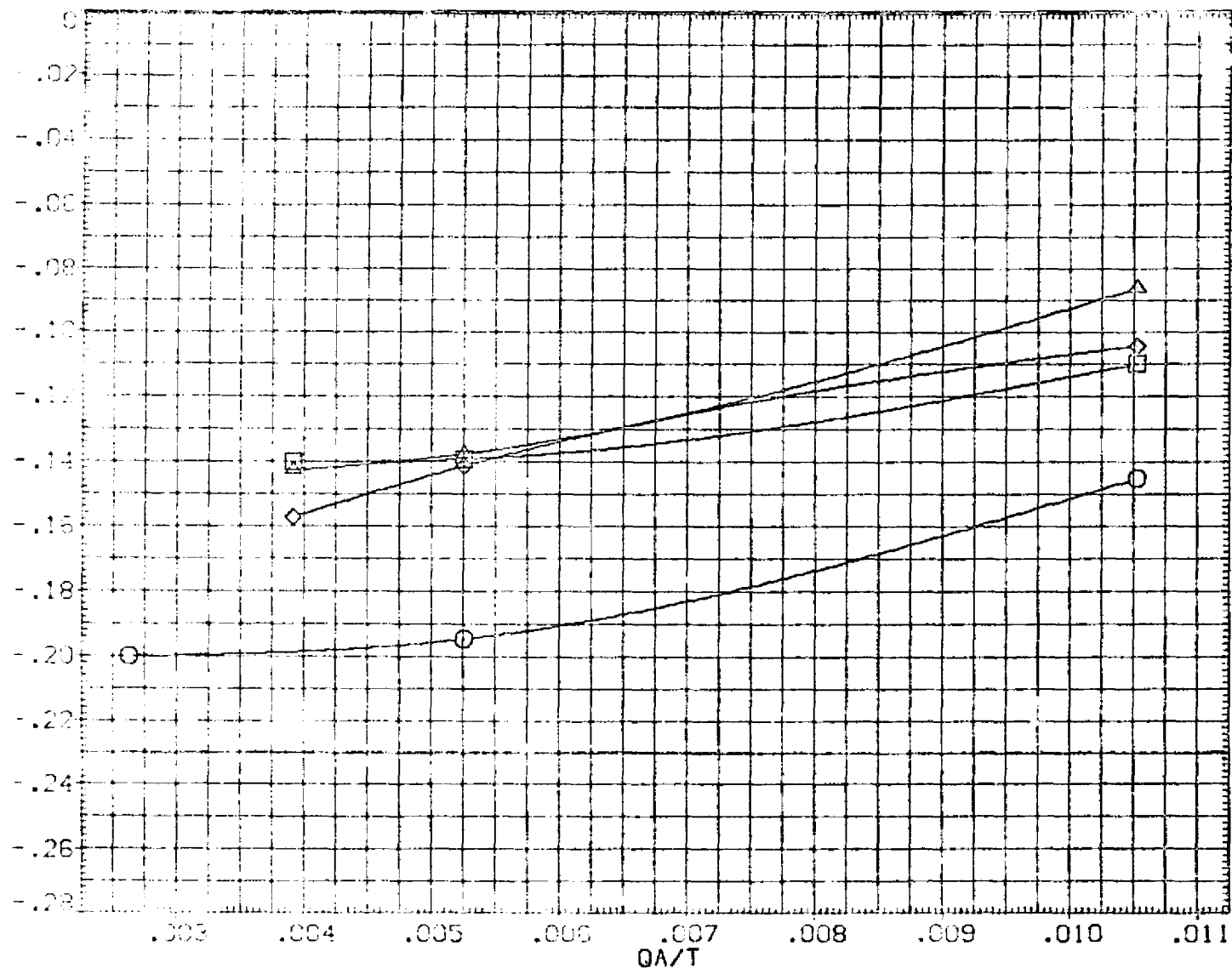


FIGURE 93. AREA RATIO EFFECTS, L/H DOWN FIRING JETS

(F) ALPHA = 2.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA071)	CIN31 LARC CFHT 118 (MA-22)
(SJA072)	CIN34 LARC CFHT 118 (MA-22)
(SJA073)	CIN47 LARC CFHT 118 (MA-22)
(SJA074)	CIN43 LARC CFHT 118 (MA-22)

ELEVGN	NO.JET	BDFLAP	BETA	REFERENCE INFORMATION
.000	2.000	.000	.000	SREF 2690.0000 SQ.FT.
.000	2.000	.000	.000	LREF 474.8000 INCHES
.000	2.000	.000	.000	BREF 936.6800 INCHES
.000	2.000	.000	.000	XMRP 1076.7000 IN. X0
				YMRP .0000 IN. Y0
				ZMRP 375.0000 IN. Z0
				SCALE .0100

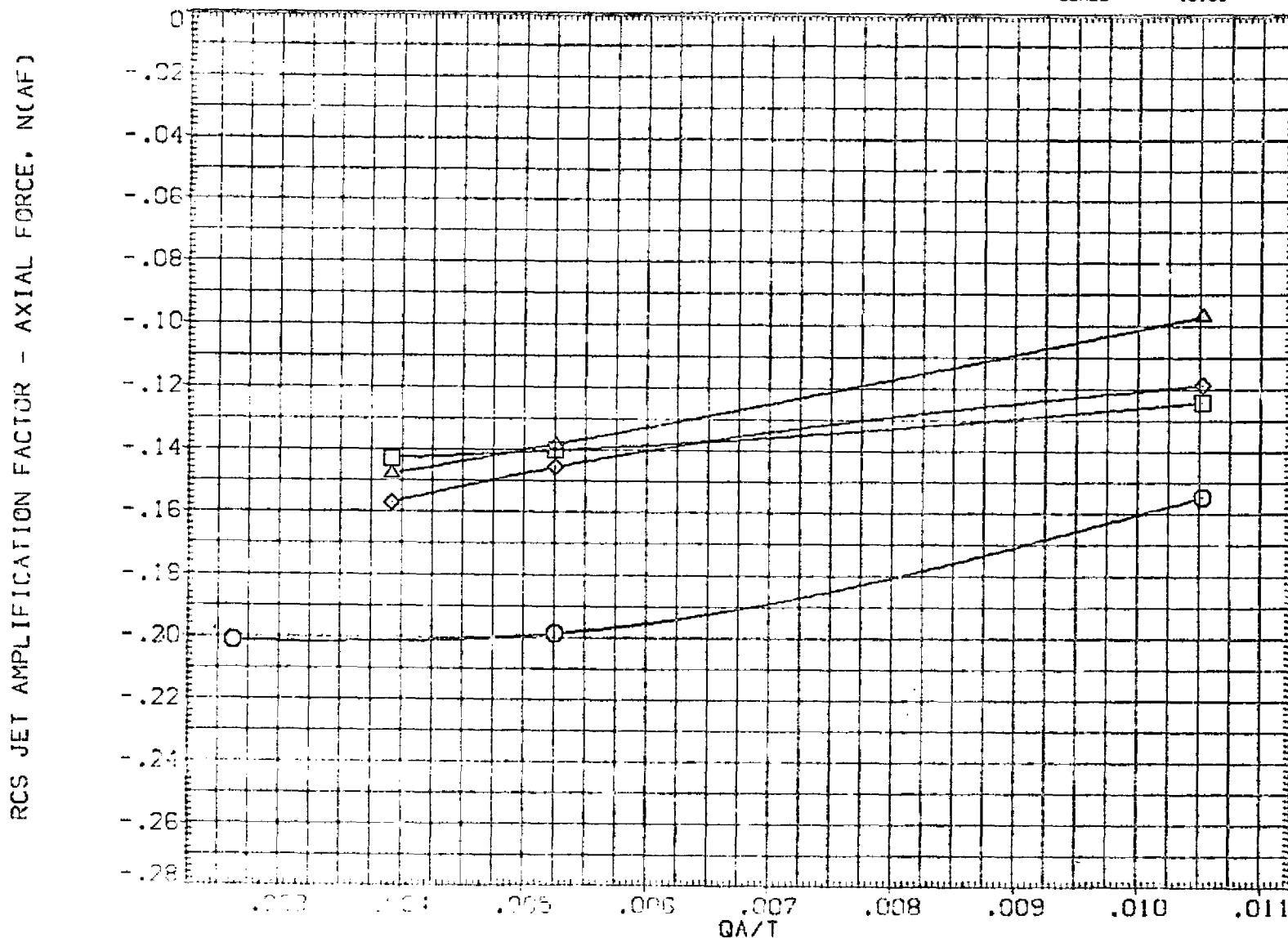


FIGURE 93. AREA RATIO EFFECTS, L/H DOWN FIRING JETS

(G) ALPHA = 4.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA071)	01N31 LARC CPHT 118 (MA-22)
(SJA072)	01N34 LARC CPHT 118 (MA-22)
(SJA073)	01N47 LARC CPHT 118 (MA-22)
(SJA074)	01N43 LARC CPHT 118 (MA-22)

ELEVON	NO. JET	BDFLAP	BETA	REFERENCE INFORMATION		
.000	2.000	.000	.000	SREF	2690.0000	59. FT.
.000	2.000	.000	.000	LREF	474.8000	INCHES
.000	2.000	.000	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. 70
				YMRP	.0000	IN. 70
				ZMRP	375.0000	IN. 20
				SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - AXIAL FORCE, N(AF)

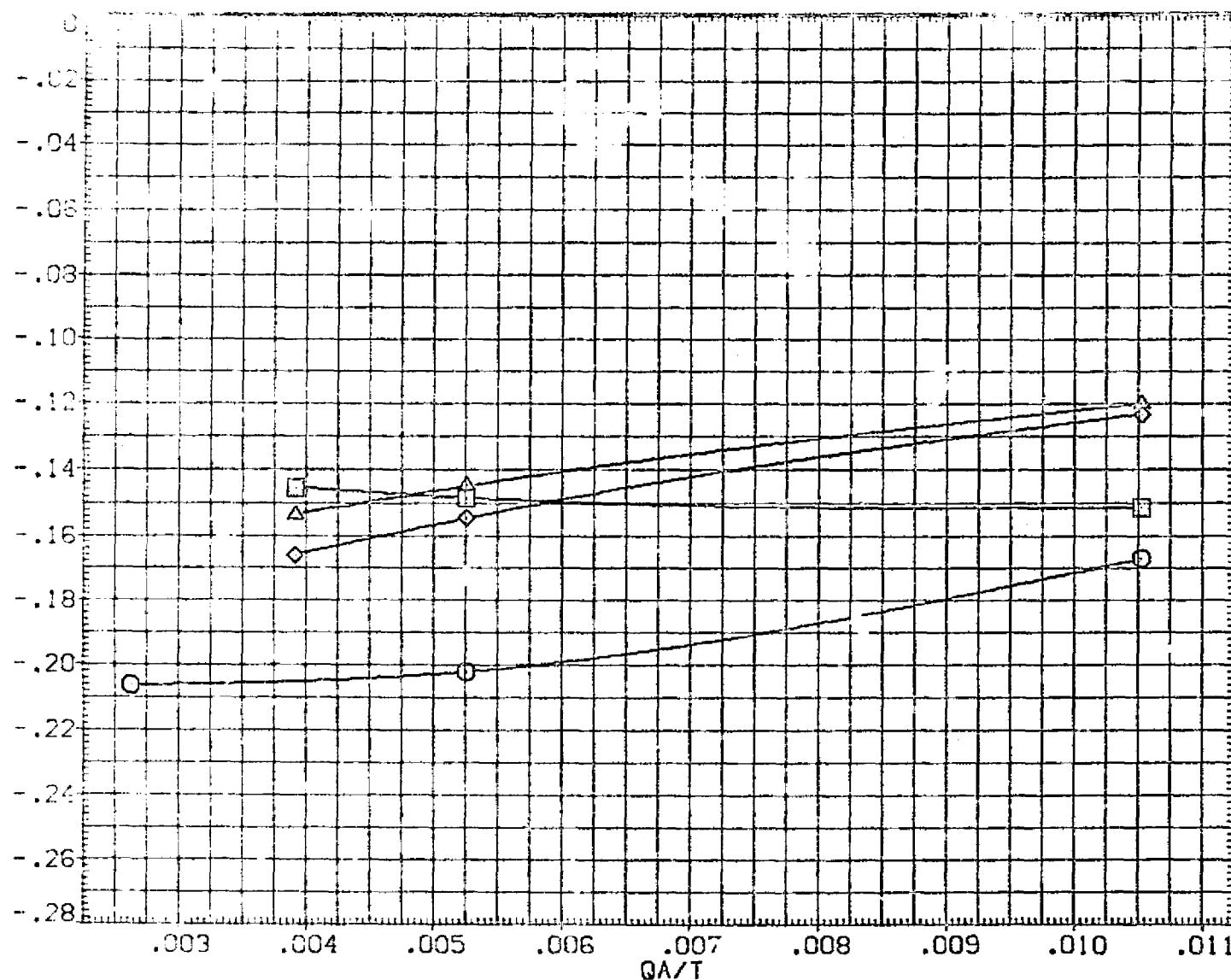


FIGURE 93. AREA RATIO EFFECTS, L/H DOWN FIRING JETS
(H) ALPHA = 6.00

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(SJA071)	○	01N31	LARC CFHT 118 (MA-22)
(SJA072)	□	01N34	LARC CFHT 118 (MA-22)
(SJA073)	◇	01N47	LARC CFHT 118 (MA-22)
(SJA074)	△	01N43	LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BD FLAP	BETA	REFERENCE INFORMATION		
.000	2.000	.000	.000	SREF	2690.0000	SQ. FT.
.000	2.000	.000	.000	LREF	474.8000	INCHES
.000	2.000	.000	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - AXIAL FORCE, N(AF)

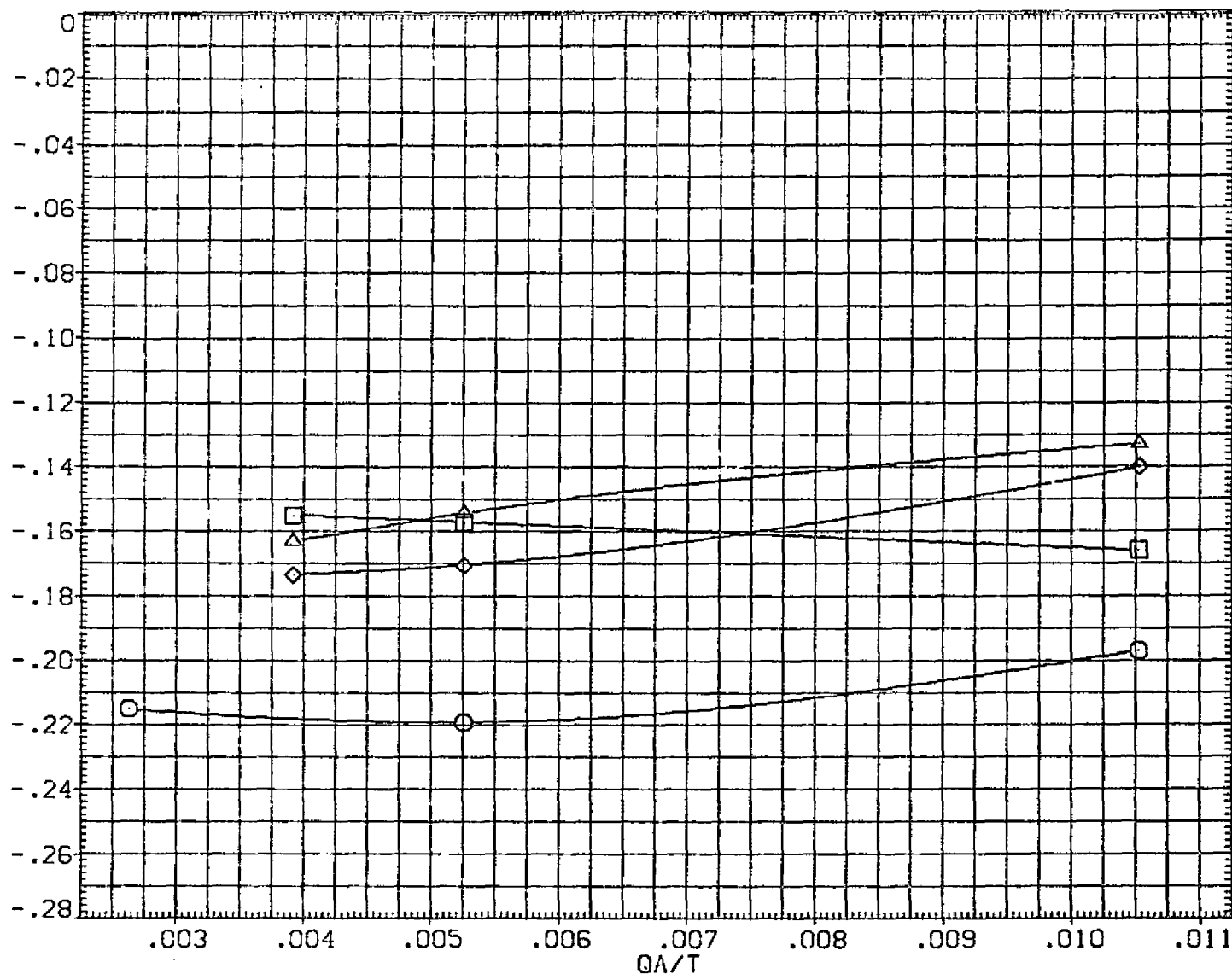


FIGURE 93. AREA RATIO EFFECTS, L/H DOWN FIRING JETS
(1) ALPHA = 8.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA071) □	01N31 LARC CFHT 118 (MA-22)
(SJA072) ○	01N34 LARC CFHT 118 (MA-22)
(SJA073) ◇	01N47 LARC CFHT 118 (MA-22)
(SJA074) △	01N43 LARC CFHT 118 (MA-22)

ELEVON	NO.JET	BDPLAP	BETA	REFERENCE INFORMATION		
.000	2.000	.000	.000	SREF	2690.0000	50 FT.
.000	2.000	.000	.000	LREF	474.8000	INCHES
.000	2.000	.000	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
				YRP	.0000	IN. Y0
				ZRP	375.0000	IN. Z0
				SCALE	.0100	

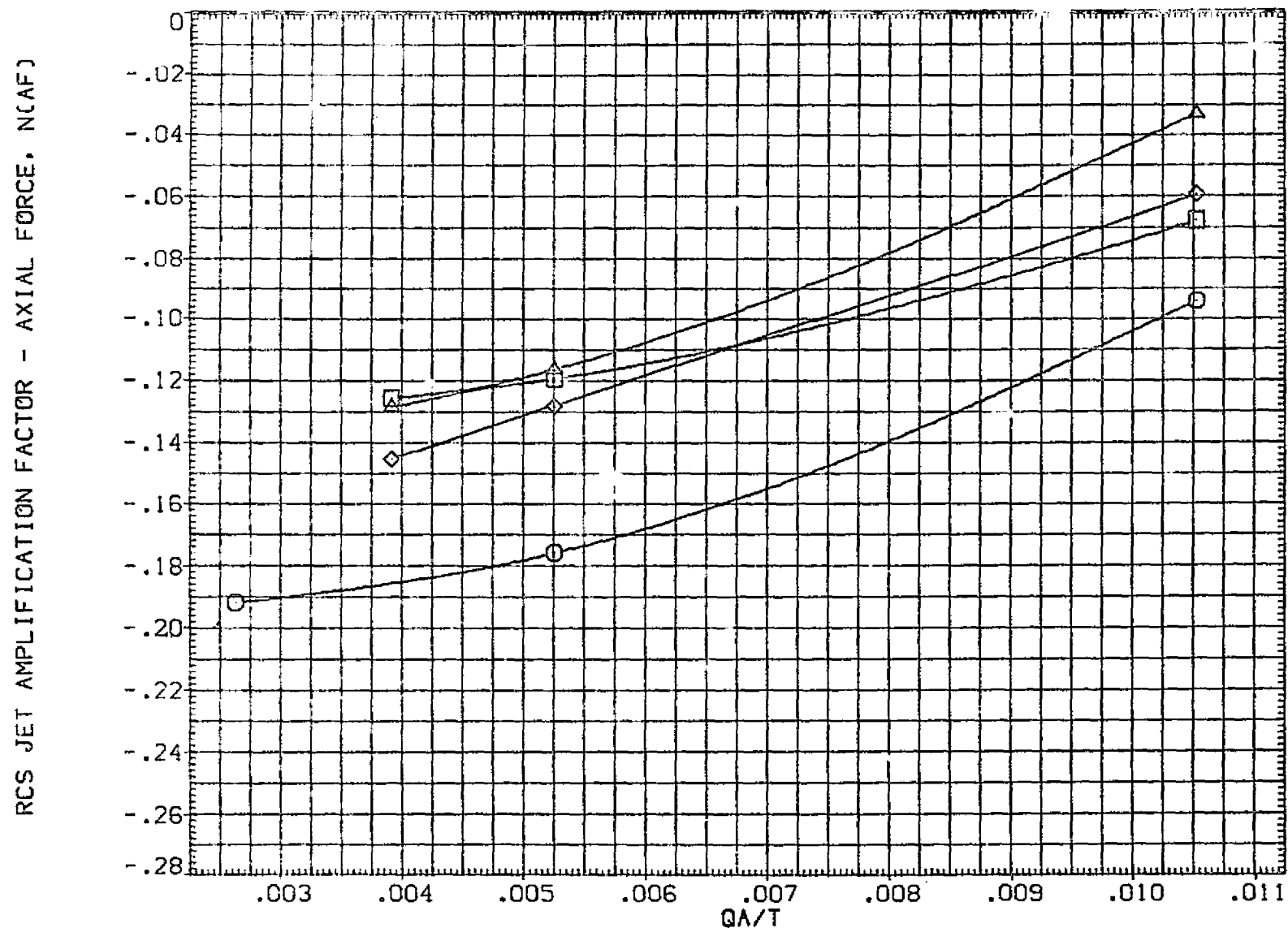


FIGURE 93. AREA RATIO EFFECTS, L/H DOWN FIRING JETS
(J) ALPHA = 10.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	NO. JET	BD FLAP	BETA	REFERENCE INFORMATION		
(SJA071)	01N31 LARC CFHT 118 (MA-22)	.000	2.000	.000	.000	SREF	2690.0000	50. FT.
(SJA072)	01N34 LARC CFHT 118 (MA-22)	.000	2.000	.000	.000	LREF	474.8000	INCHES
(SJA073)	01N47 LARC CFHT 118 (MA-22)	.000	2.000	.000	.000	BREF	936.6800	INCHES
(SJA074)	01N43 LARC CFHT 118 (MA-22)	.000	2.000	.000	.000	XMRP	1076.7000	IN. XO
						YMRP	.0000	IN. YO
						ZMRP	375.0000	IN. ZO
						SCALE	.0100	

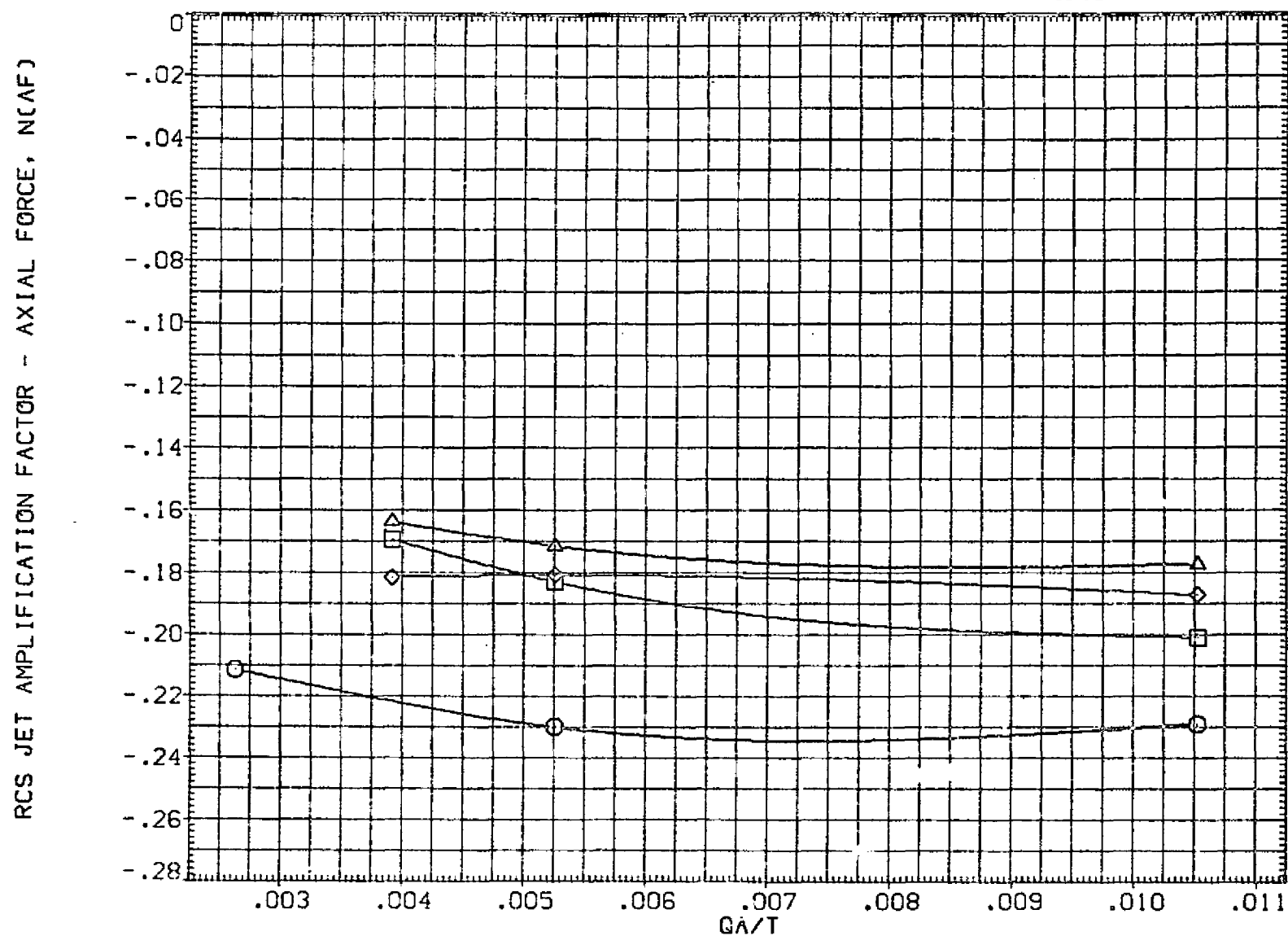


FIGURE 93. AREA RATIO EFFECTS, L/H DOWN FIRING JETS
(K) ALPHA = 15.00

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	NO. JET	BD FLAP	BETA	REFERENCE INFORMATION		
(SJA071)	□	01N31 LARC CFHT 118 (MA-22)	.000	2.000	.000	.000	SREF	2690.0000	50. FT.
(SJA072)	□	01N34 LARC CFHT 118 (MA-22)	.000	2.000	.000	.000	LREF	471.0000	INCHES
(SJA073)	◇	01N47 LARC CFHT 118 (MA-22)	.000	2.000	.000	.000	BREF	103.6800	INCHES
(SJA074)	△	01N43 LARC CFHT 118 (MA-22)	.000	2.000	.000	.000	XIRP	1076.7000	IN. X
							ZIRP	.0000	IN. Y0
							ZIRP	275.0000	IN. Z0
							SCALE	.0100	

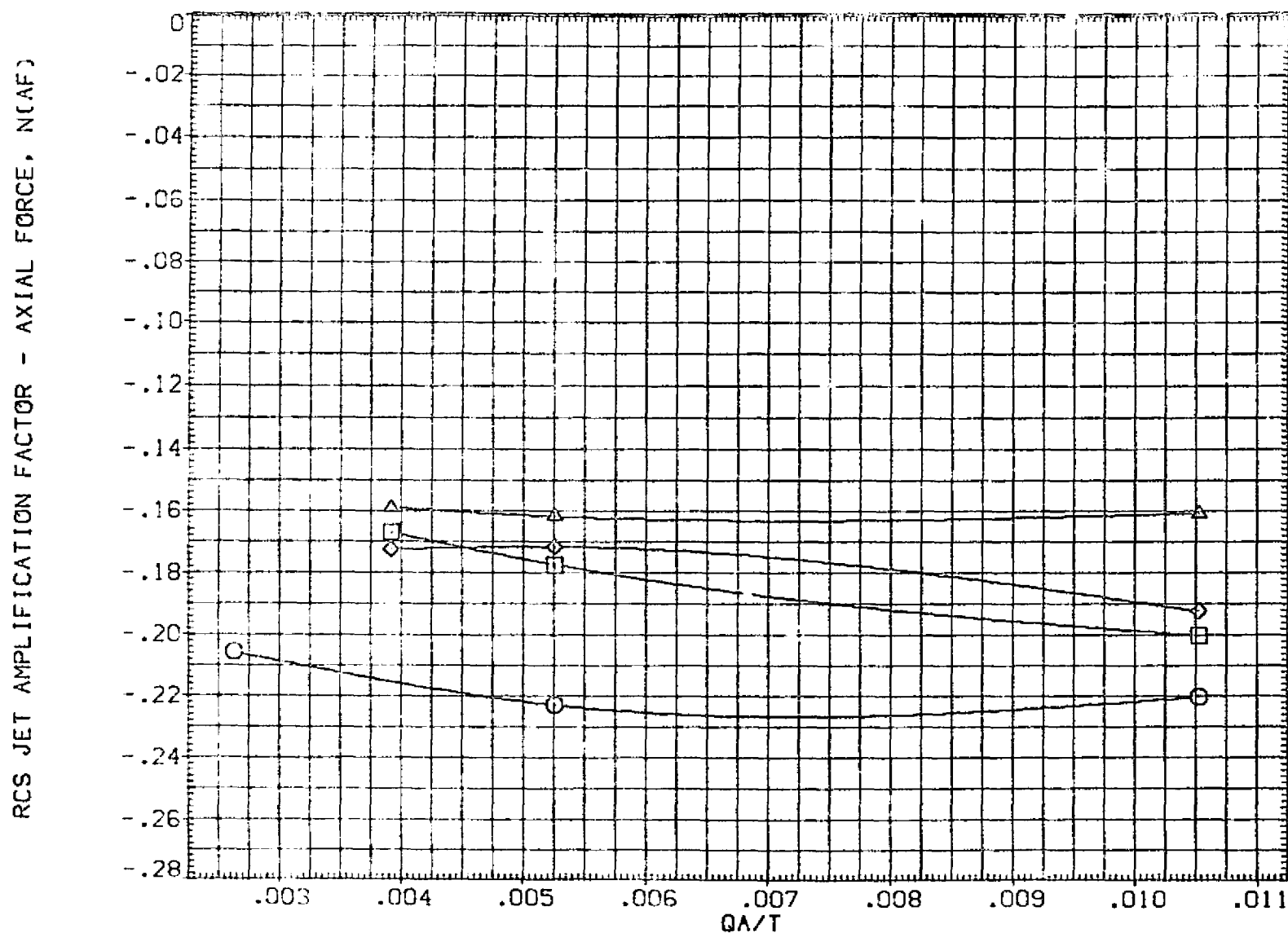


FIGURE 93. AREA RATIO EFFECTS, L/H DOWN FIRING JETS

(L)ALPHA = 20.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	NO. JET	BD FLAP	BETA	REFERENCE INFORMATION		
(SJA071)	01N31 LARC CFHT 118 (MA-22)	.000	2.000	.000	.000	SREF	2690.0000	SQ. FT.
(SJA072)	01N34 LARC CFHT 118 (MA-22)	.000	2.000	.000	.000	LREF	474.8000	INCHES
(SJA073)	01N47 LARC CFHT 118 (MA-22)	.000	2.000	.000	.000	BREF	936.6800	INCHES
(SJA074)	01N43 LARC CFHT 118 (MA-22)	.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
						YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0100	

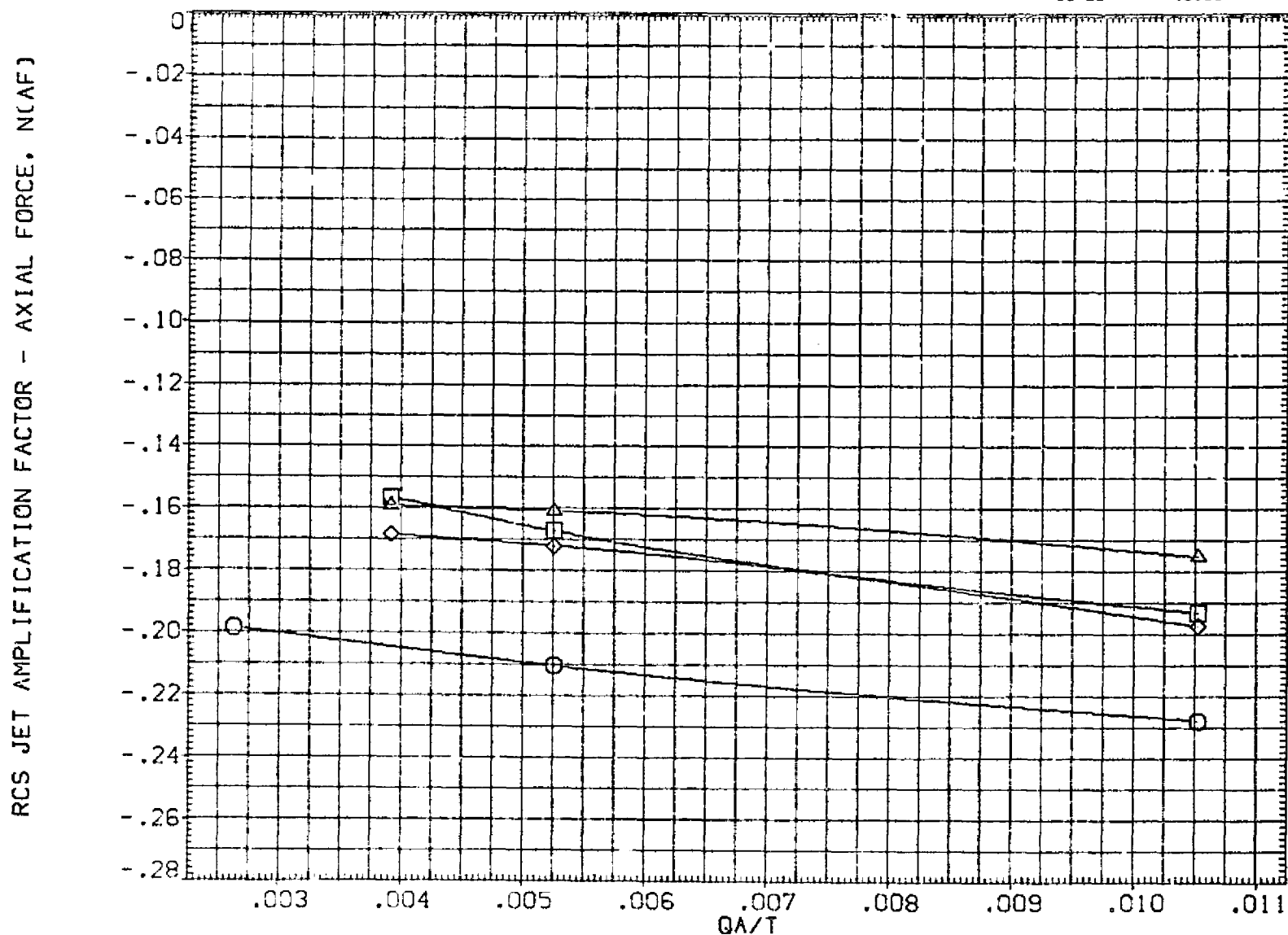


FIGURE 93. AREA RATIO EFFECTS, L/H DOWN FIRING JETS
(M) ALPHA = 25.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA071)	01N31 LARC CFHT 118 (MA-22)
(SJA072)	01N34 LARC CFHT 118 (MA-22)
(SJA073)	01N47 LARC CFHT 118 (MA-22)
(SJA074)	01N43 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BD FLAP	BETA	REFERENCE INFORMATION
.000	2.000	.000	.000	SREF 2690.0000 SQ. FT.
.000	2.000	.000	.000	LREF 174.8000 IN. 15
.000	2.000	.000	.000	BREF 936.6800 IN. 15
.000	2.000	.000	.000	XMRP 1376.7000 IN. 10
				YMRP .0000 IN. 12
				ZMRP 375.0000 IN. 20
				SCALE .0100

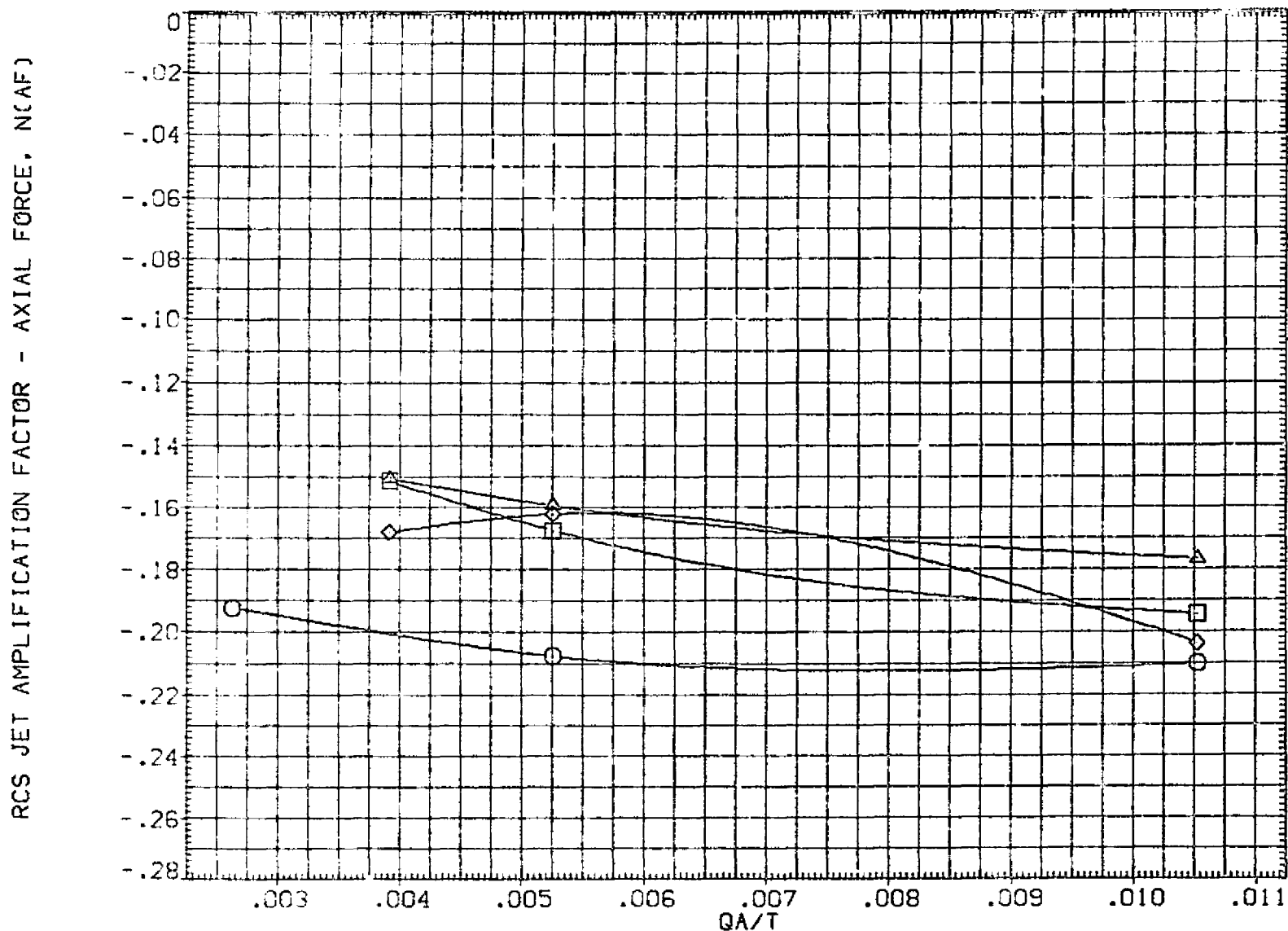


FIGURE 93. AREA RATIO EFFECTS, L/H DOWN FIRING JETS
(N) ALPHA = 30.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA071)	GIN3; LARC CFHT 118 (MA-22)
(SJA072)	GIN34 LARC CFHT 118 (MA-22)
(SJA073)	GIN47 LARC CFHT 118 (MA-22)
(SJA074)	GIN43 LARC CFHT 118 (MA-22)

ELEVON	NO.JET	BDFLAP	BETA	REFERENCE INFORMATION		
.000	2.000	.000	.000	SREF	2690.0000	SQ.FT.
.000	2.000	.000	.000	LREF	474.8000	INCHES
.000	2.000	.000	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - ROLL, N(RM)

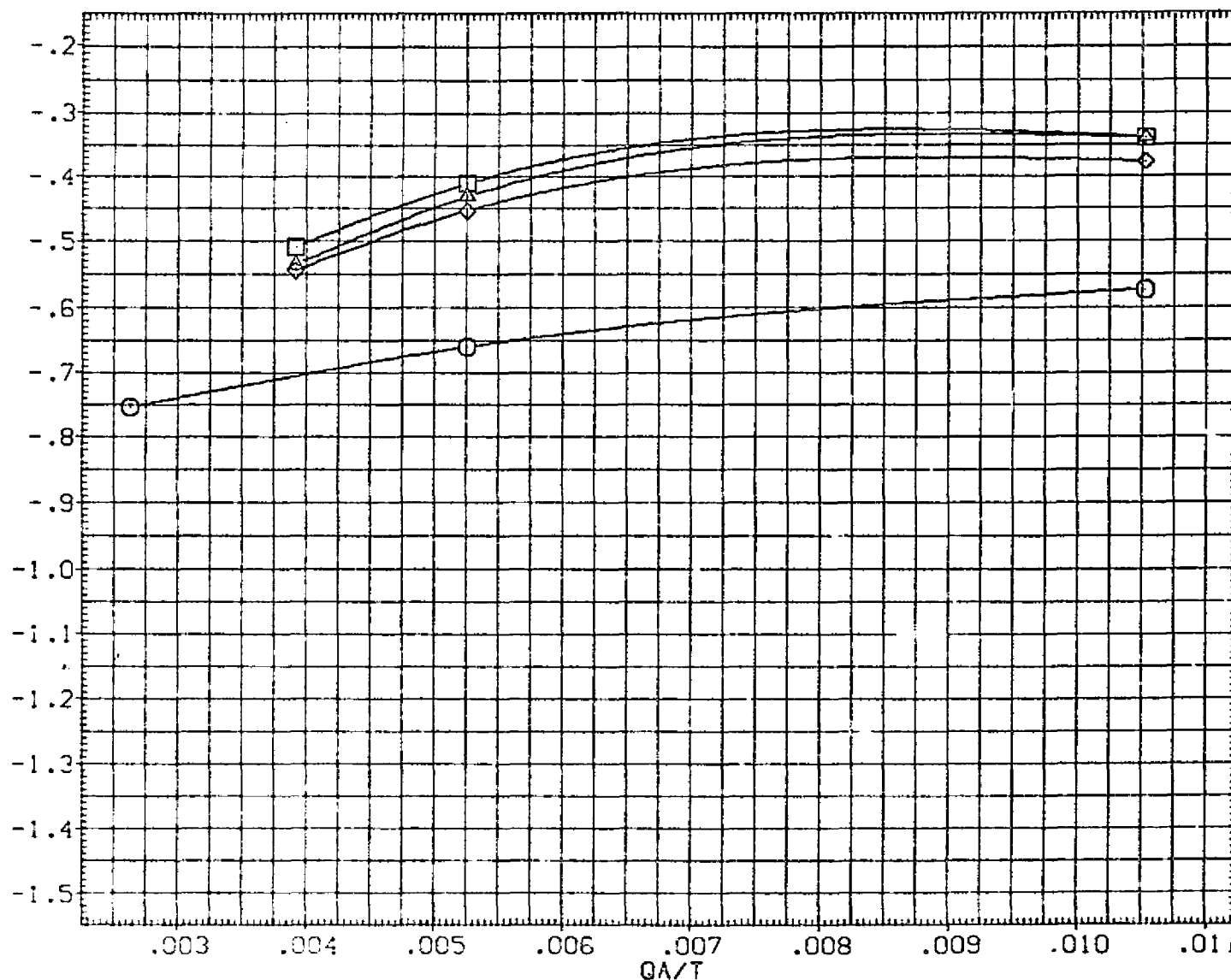


FIGURE 93. AREA RATIO EFFECTS, L/H DOWN FIRING JETS

(A) ALPHA = -8.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA071)	01N31 LARC CFHT 118 (MA-22)
(SJA072)	01N34 LARC CFHT 118 (MA-22)
(SJA073)	01N47 LARC CFHT 118 (MA-22)
(SJA074)	01N43 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BD FLAP	BETA	REFERENCE INFORMATION
.000	2.000	.000	.000	SREF 2690.0000 SQ. FT.
.000	2.000	.000	.000	LREF 474.8000 INCHES
.000	2.000	.000	.000	BREF 336.6800 INCHES
.000	2.000	.000	.000	XMRP 1076.7000 IN. 40
				YMRP .0000 IN. 40
				ZMRP 375.0000 IN. 40
				SCALE .0100

RCS JET AMPLIFICATION FACTOR - ROLL, NCRM

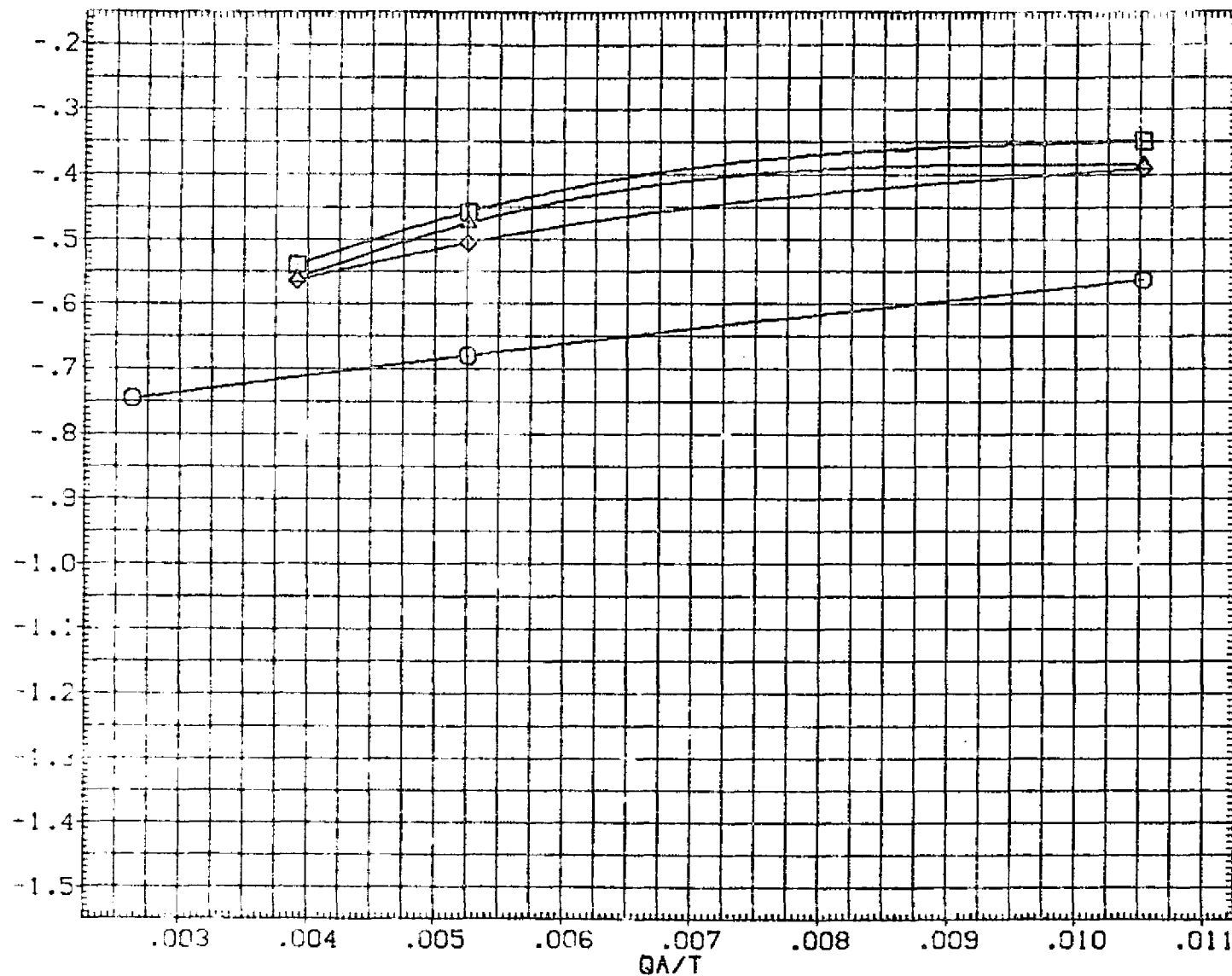


FIGURE 93. AREA RATIO EFFECTS, L/H DOWN FIRING JETS
(B) ALPHA = -6.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA071)	□ IN31 LARC CFHT 118 (MA-22)
(SJA072)	□ IN34 LARC CFHT 118 (MA-22)
(SJA073)	⊗ IN47 LARC CFHT 118 (MA-22)
(SJA074)	⊗ IN43 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BD FLAP	BETA	REFERENCE INFORMATION		
.000	2.000	.000	.000	SREF	2690.0000	SQ. FT.
.000	2.000	.000	.000	LREF	474.8000	INCHES
.000	2.000	.000	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - ROLL, N(RM)

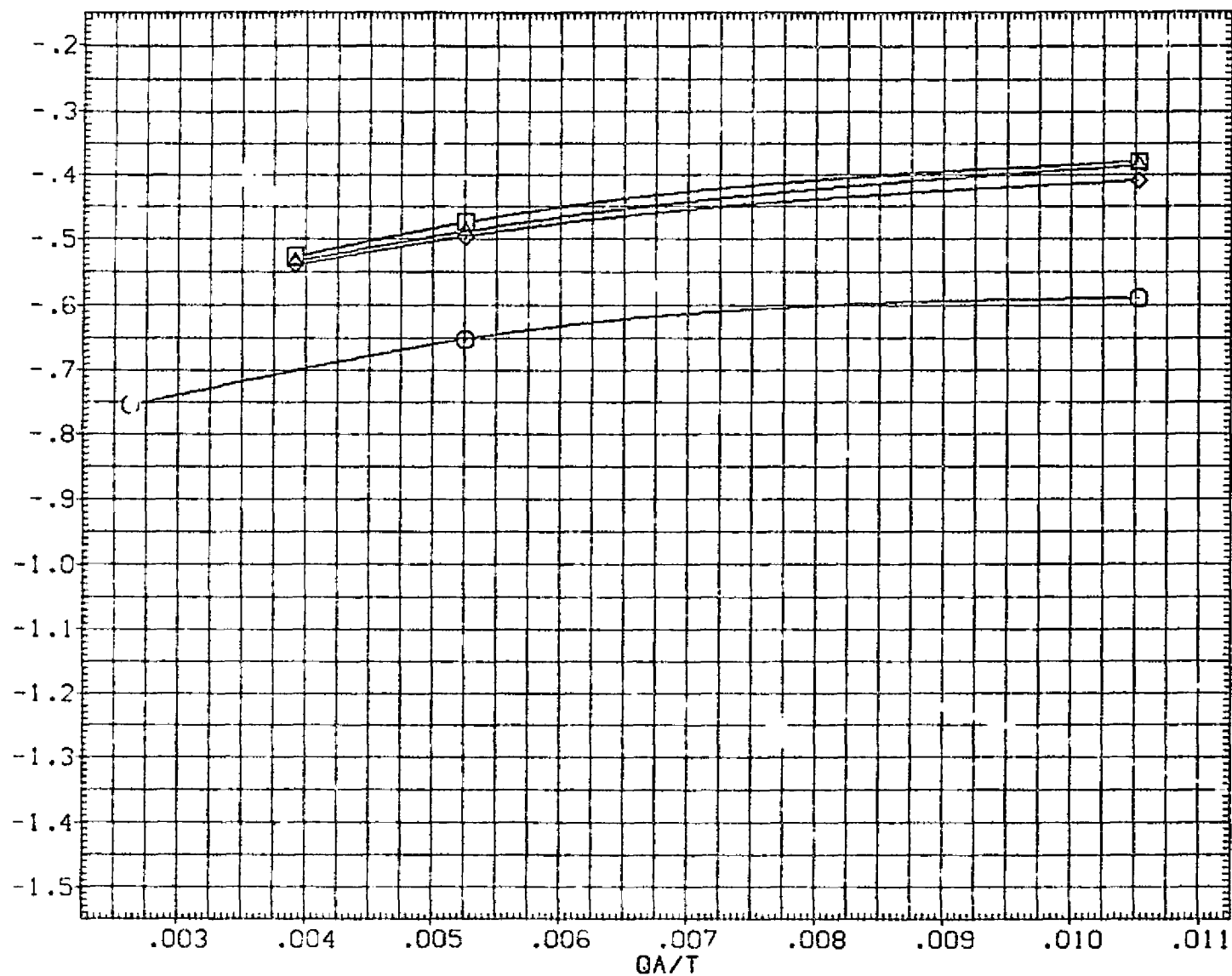


FIGURE 93. AREA RATIO EFFECTS, L/H DOWN FIRING JETS

(C) ALPHA = -4.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA071)	01N31 LARC CFHT 118 (MA-22)
(SJA072)	01N34 LARC CFHT 118 (MA-22)
(SJA073)	01N47 LARC CFHT 118 (MA-22)
(SJA074)	01N43 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BD-LAP	BETA	REFERENCE INFORMATION
.000	2.000	.000	.000	SREF 2690.0000 SQ. FT.
.000	2.000	.000	.000	LREF 474.8000 INCHES
.000	2.000	.000	.000	BREF 926.6800 INCHES
.000	2.000	.000	.000	XMREF 1028.7000 IN. X
				YMREF .0000 IN. Y
				ZREF 375.0000 IN. Z
				SCALE .0100

RCS JET AMPLIFICATION FACTOR - ROLL, N(RM)

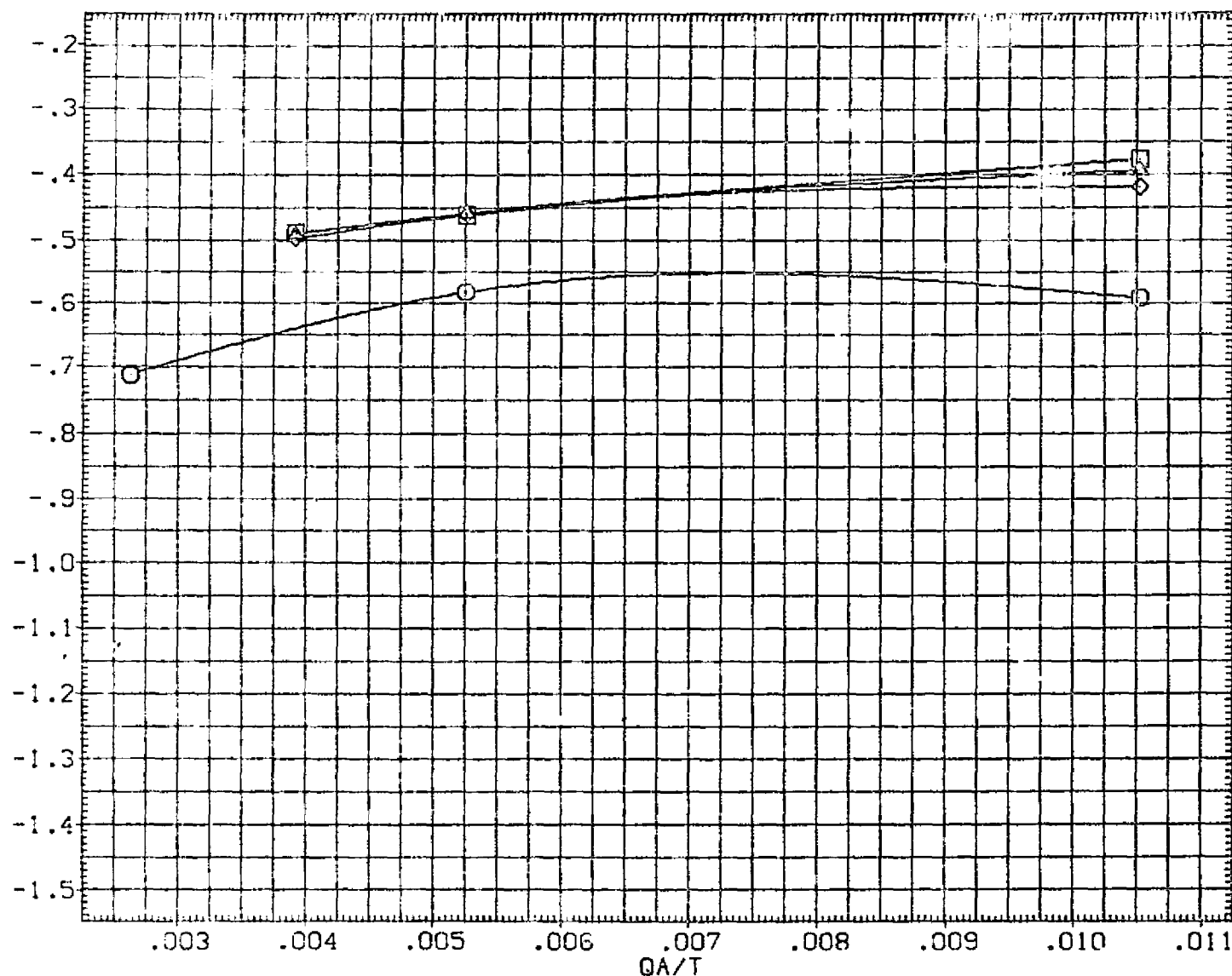


FIGURE 93. AREA RATIO EFFECTS, L/H DOWN FIRING JETS

(O) ALPHA = -2.00

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	NO. JET	BD FLAP	BETA	REFERENCE INFORMATION		
(SJA071)	□	01N31 LARC CFHT 118 (MA-22)	.000	2.000	.000	.000	SREF	2690.0000	50. FT.
(SJA072)	□	01N34 LARC CFHT 118 (MA-22)	.000	2.000	.000	.000	LREF	474.8000	INCHES
(SJA073)	×	01N47 LARC CFHT 118 (MA-22)	.000	2.000	.000	.000	BREF	936.6800	INCHES
(SJA074)	△	01N43 LARC CFHT 118 (MA-22)	.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
							YMRP	.0000	IN. Y0
							ZMRP	375.0000	IN. Z0
							SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - ROLL, N(RM)

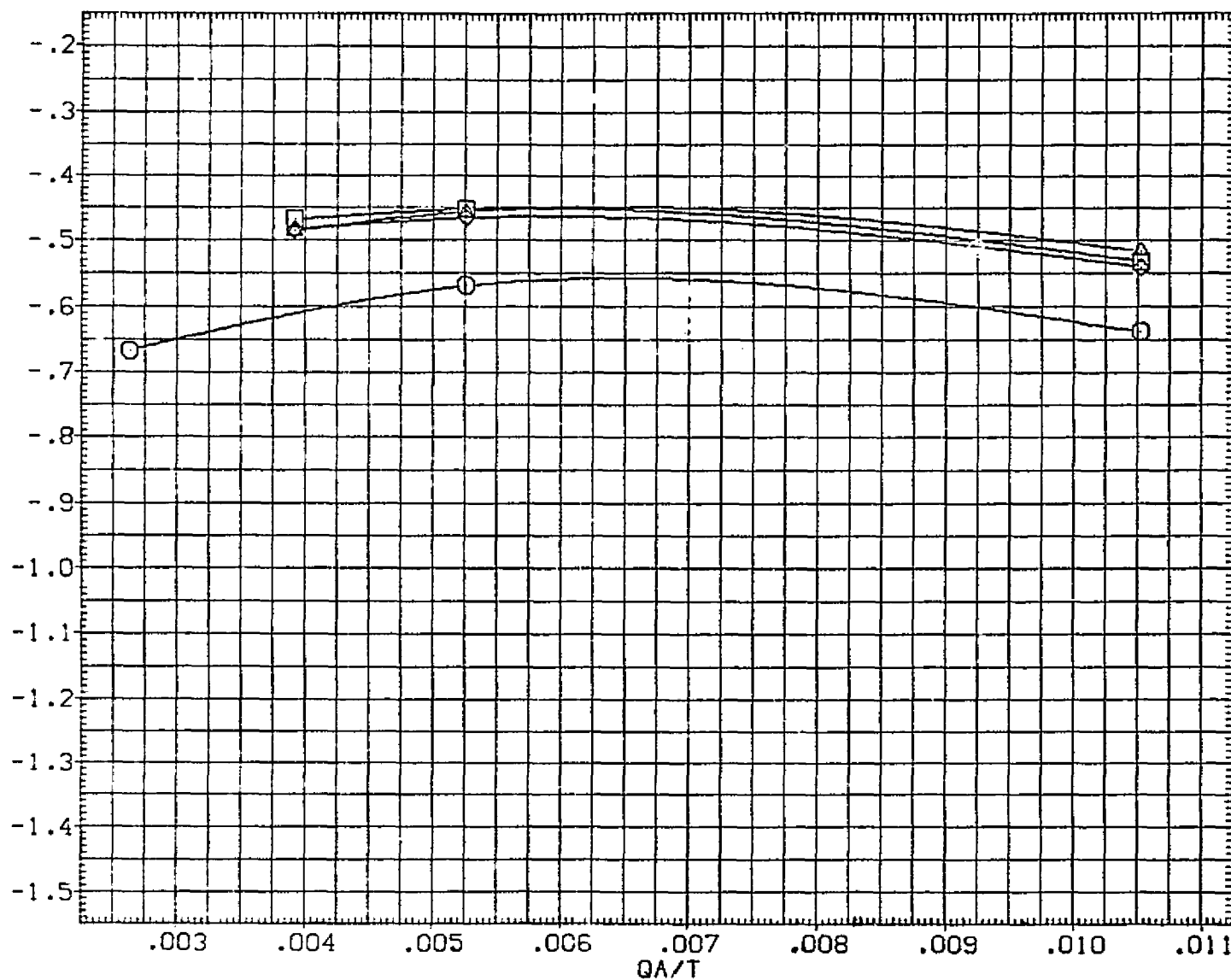


FIGURE 93. AREA RATIO EFFECTS, L/H DOWN FIRING JETS

(E) ALPHA = .00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA071) ○	01N31 LARC CFHT 118 (MA-22)
(SJA072) □	01N34 LARC CFHT 118 (MA-22)
(SJA073) ◇	01N47 LARC CFHT 118 (MA-22)
(SJA074) △	01N43 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BSFLAP	BETA	REFERENCE INFORMATION		
.000	2.000	.000	.000	SREF	2690.0000	50. FT.
.000	2.000	.000	.000	LREF	474.8000	INCHES
.000	2.000	.000	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XMPP	1076.7000	IN. X0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - ROLL, N(RM)

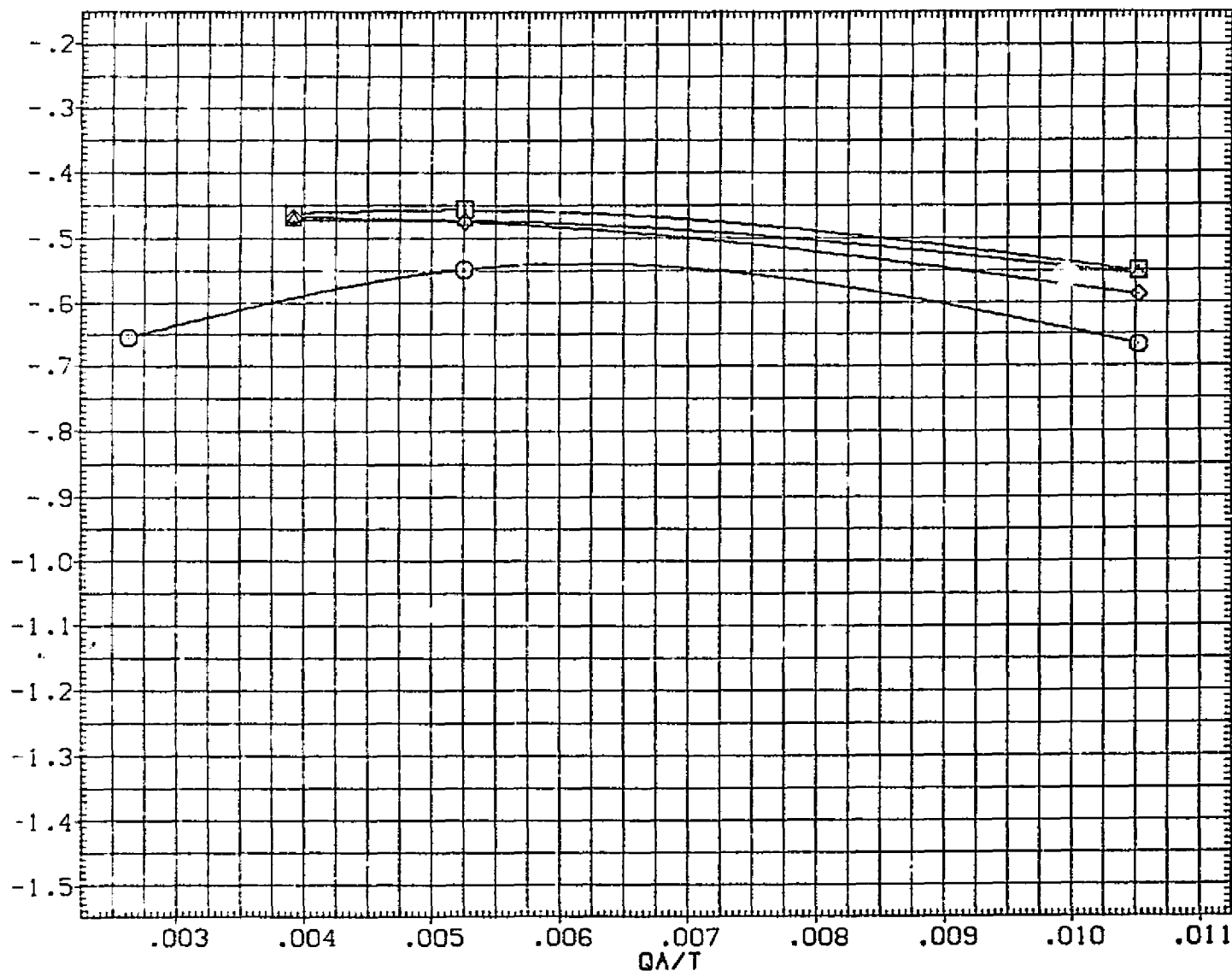


FIGURE 93. AREA RATIO EFFECTS, L/H DOWN FIRING JETS
(F)ALPHA = 2.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA071)	01N31 LARC CFHT 118 (MA-22)
(SJA072)	01N34 LARC CFHT 118 (MA-22)
(SJA073)	01N47 LARC CFHT 118 (MA-22)
(SJA074)	01N43 LARC CFHT 118 (MA-22)

ELEVON	NO.JET	BDFLAP	BETA	REFERENCE INFORMATION
.000	2.000	.000	.000	SREF 2690.0000 SQ.FT.
.000	2.000	.000	.000	LREF 474.8000 INCHES
.000	2.000	.000	.000	BREF 936.6800 INCHES
.000	2.000	.000	.000	XMRP 1076.7000 IN. X0
				YMRP .0000 IN. Y0
				ZMRP 375.0000 IN. Z0
				SCALE .0100

RCS JET AMPLIFICATION FACTOR - ROLL, NCRM

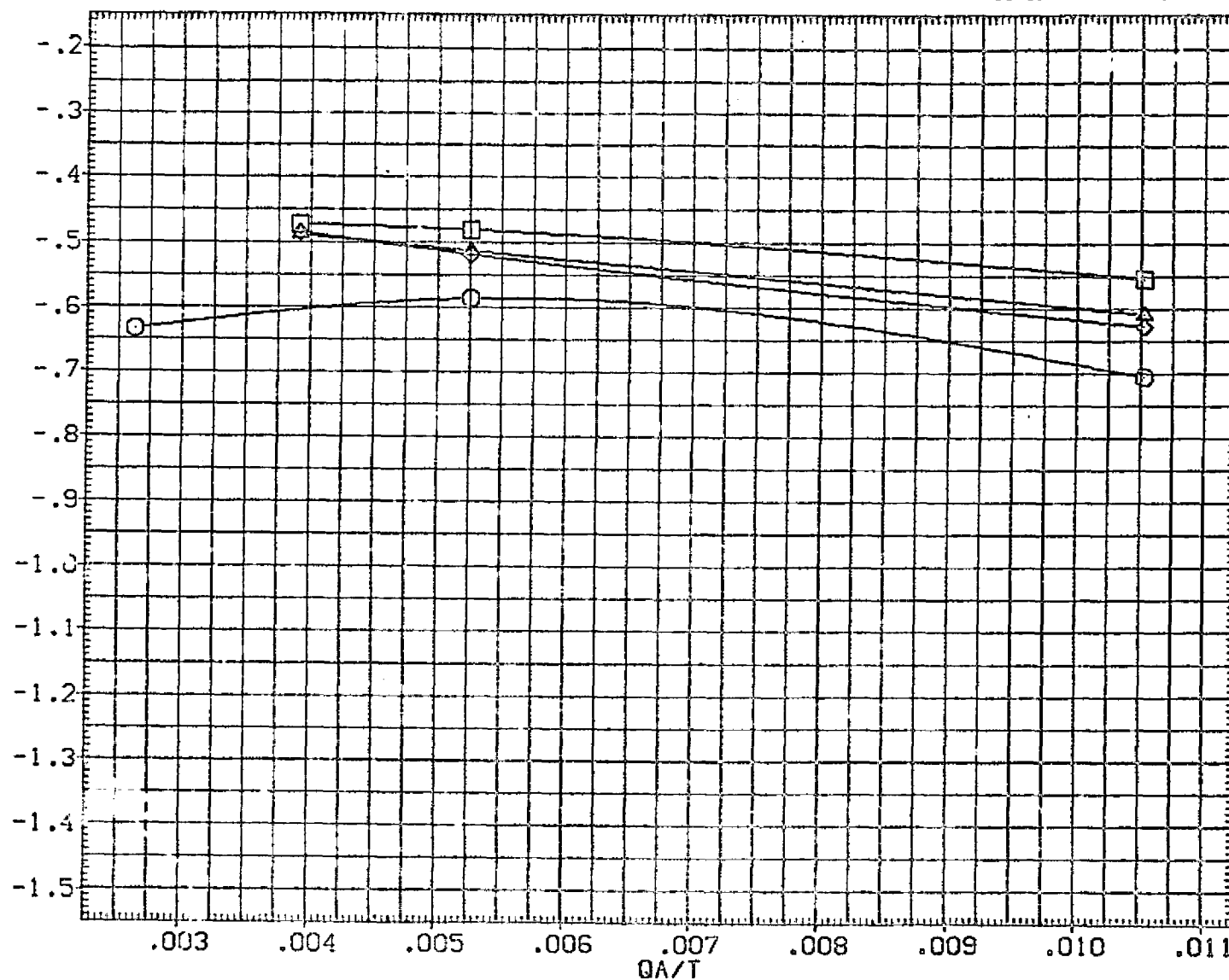


FIGURE 93. AREA RATIO EFFECTS, L/H DOWN FIRING JETS
(G) ALPHA = 4.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA071)	01N31 118 (MA-22)
(SJA072)	01N34 118 (MA-22)
(SJA073)	01N35 118 (MA-22)
(SJA074)	01N43 118 (MA-22)

ELEVON	NO JET	BD FLAP	BETA	REFERENCE INFORMATION
.000	2.000	.000	.000	SREF 2690.0000
.000	2.000	.000	.000	LREF 474.9000
.000	2.000	.000	.000	BREF 355.6800
.000	2.000	.000	.000	XMRP 1076.7000
.000	2.000	.000	.000	MRP .0000
.000	2.000	.000	.000	MRP 375.0000
.000	2.000	.000	.000	SCALE .010

RCS JET AMPLIFICATION FACTOR - ROLL, N(RM)

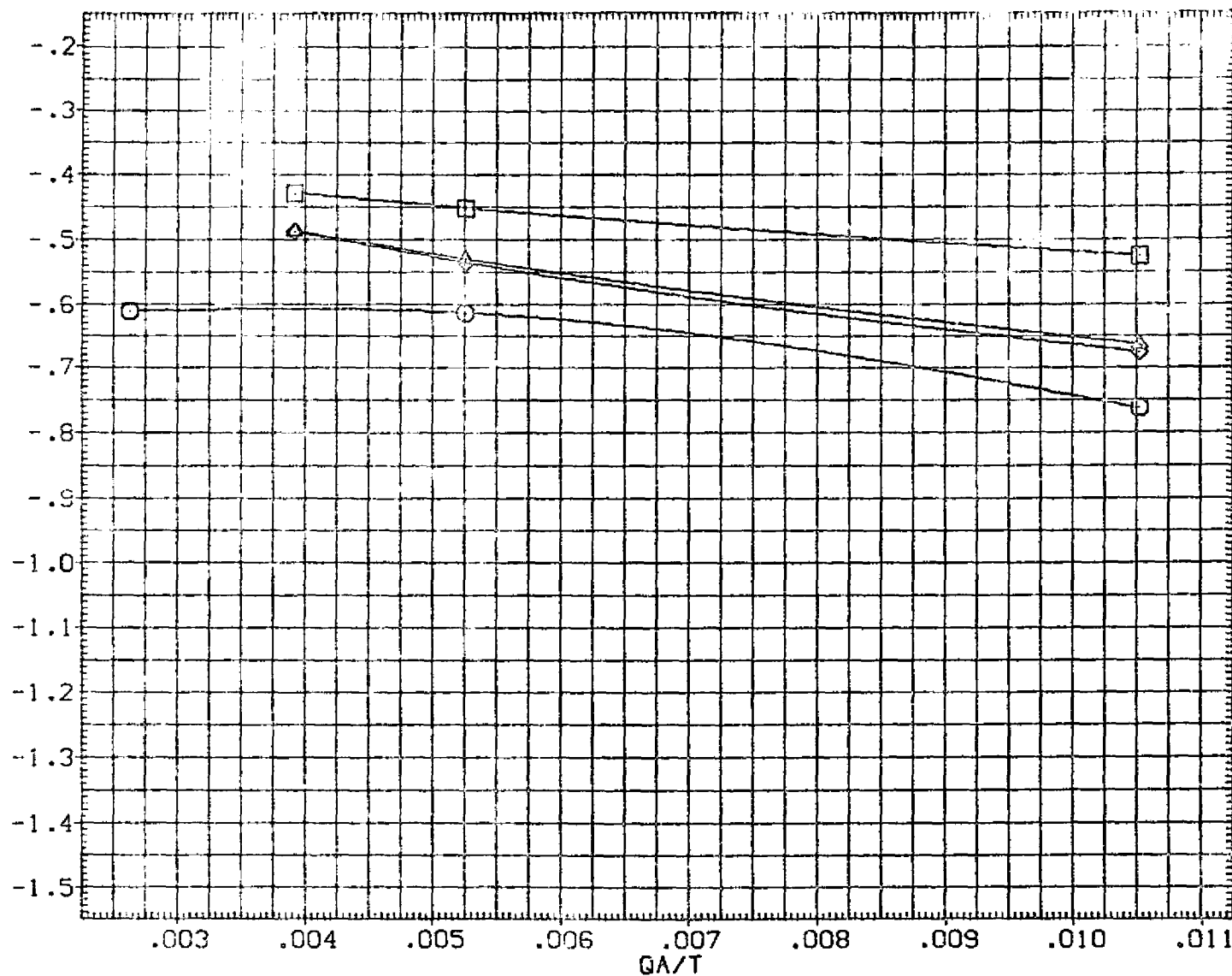


FIGURE 93. AREA RATIO EFFECTS, L/H DOWN FIRING JETS

(H) ALPHA = 6.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA071) ○	01N31 LARC CFHT 118 (MA-22)
(SJA072) □	01N34 LARC CFHT 118 (MA-22)
(SJA073) ◇	01N47 LARC CFHT 118 (MA-22)
(SJA074) △	01N43 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BOFLAP	BETA	REFERENCE INFORMATION		
.000	2.000	.000	.000	SREF	2690.0000	SQ. FT.
.000	2.000	.000	.000	LREF	474.8000	INCHES
.000	2.000	.000	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XMRF	1076.7000	IN. X0
				YMRF	.0000	IN. Y0
				ZMRF	375.0000	IN. Z0
				SCALE	.0100	

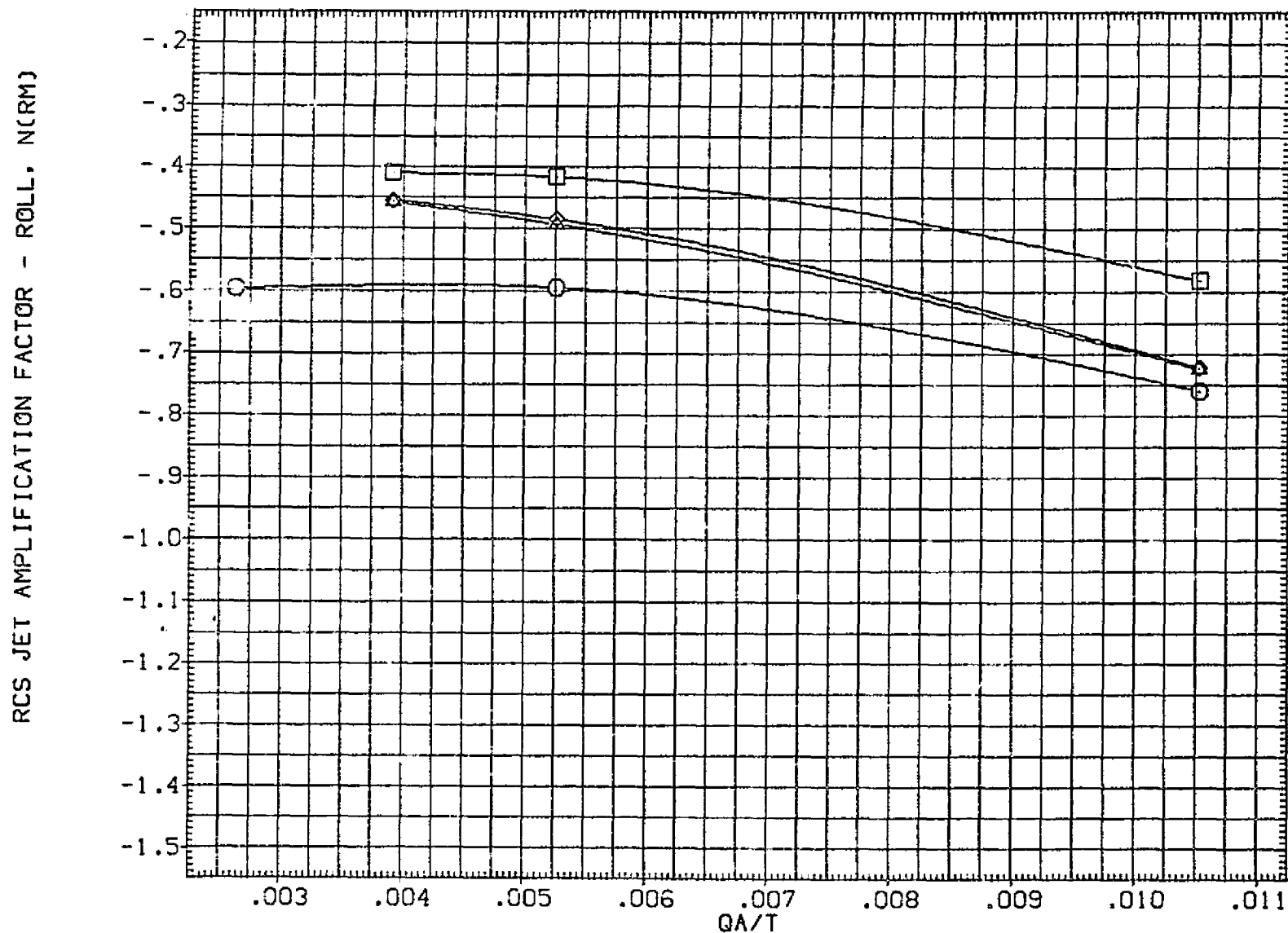


FIGURE 93. AREA RATIO EFFECTS, 1/4" DOWN FIRING JETS

(I) ALPHA = 8.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJ-071)	01N31 LARC CFHT 118 (MA-22)
(SJ-072)	01N34 LARC CFHT 118 (MA-22)
(SJ-073)	01N47 LARC CFHT 118 (MA-22)
(SJA074)	01N43 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BD FLAP	BETA	REFERENCE INFORMATION
.000	2.000	.000	.000	SREF 2390.0000 SQ. FT.
.000	2.000	.000	.000	LREF 474.8000 INCHES
.000	2.000	.000	.000	BREF 936.6800 INCHES
.000	2.000	.000	.000	YMRP 1076.7000 IN.
.000	2.000	.000	.000	ZMRP .0000 IN.
.000	2.000	.000	.000	SCALE 375.0000 IN.

RCS JET AMPLIFICATION FACTOR - ROLL, NCRM

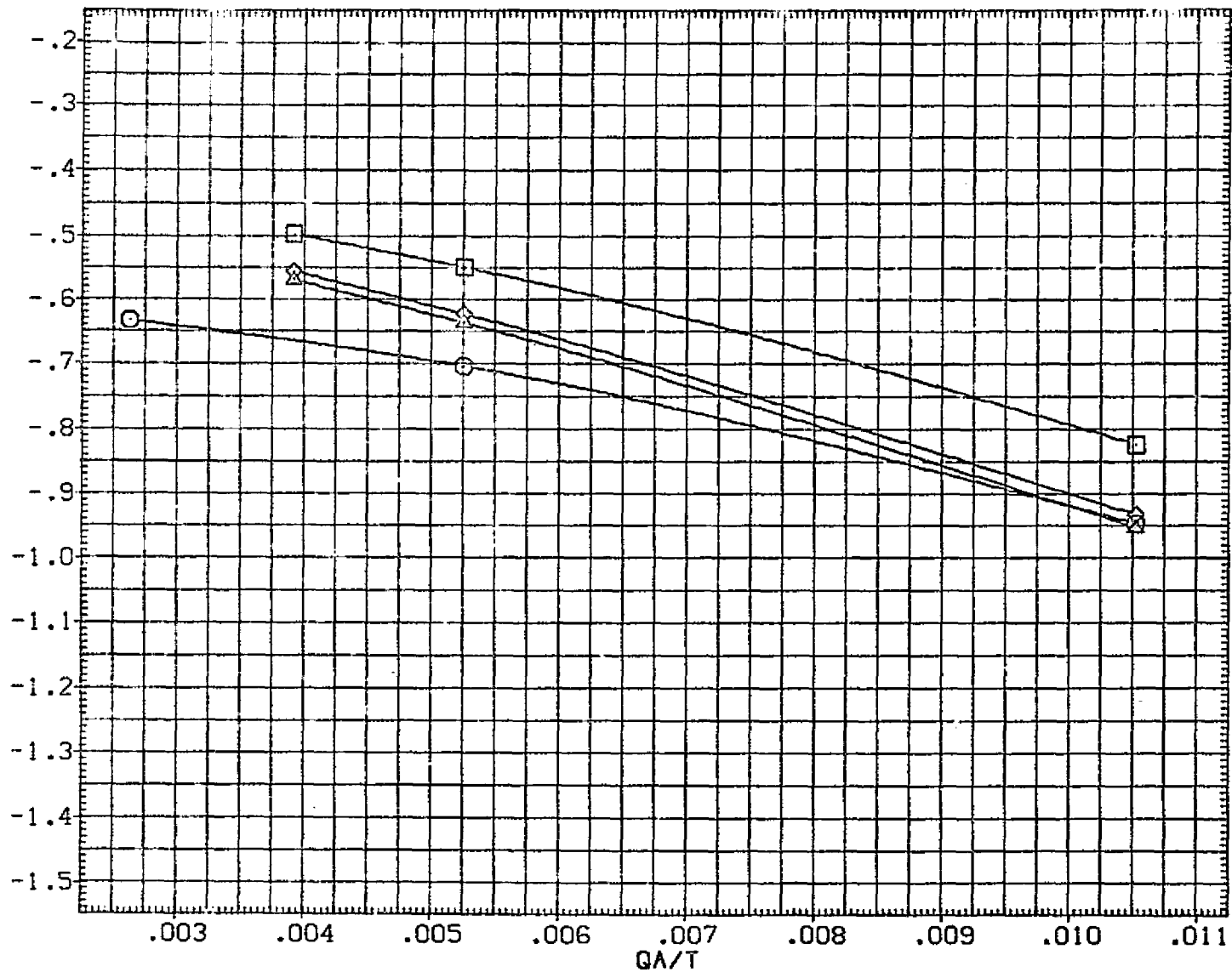


FIGURE 93. AREA RATIO EFFECTS, L/H DOWN FIRING JETS
(J)ALPHA = 10.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA071)	01N31 LARC CFHT 118 (MA-22)
(SJA072)	01N34 LARC CFHT 118 (MA-22)
(SJA073)	01N47 LARC CFHT 118 (MA-22)
(SJA074)	01N43 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BDFLAP	BETA	REFERENCE INFORMATION
.000	2.000	.000	.000	SREF 2690.0000 SQ. FT.
.000	2.000	.000	.000	LREF 474.8000 INCHES
.000	2.000	.000	.000	BREF 936.6800 INCHES
.000	2.000	.000	.000	XMRP 1076.7000 IN. X0
				YMRP .0000 IN. Y0
				ZMRP 375.0000 IN. Z0
				SCALE .0100

RCS JET AMPLIFICATION FACTOR - ROLL, NCRM

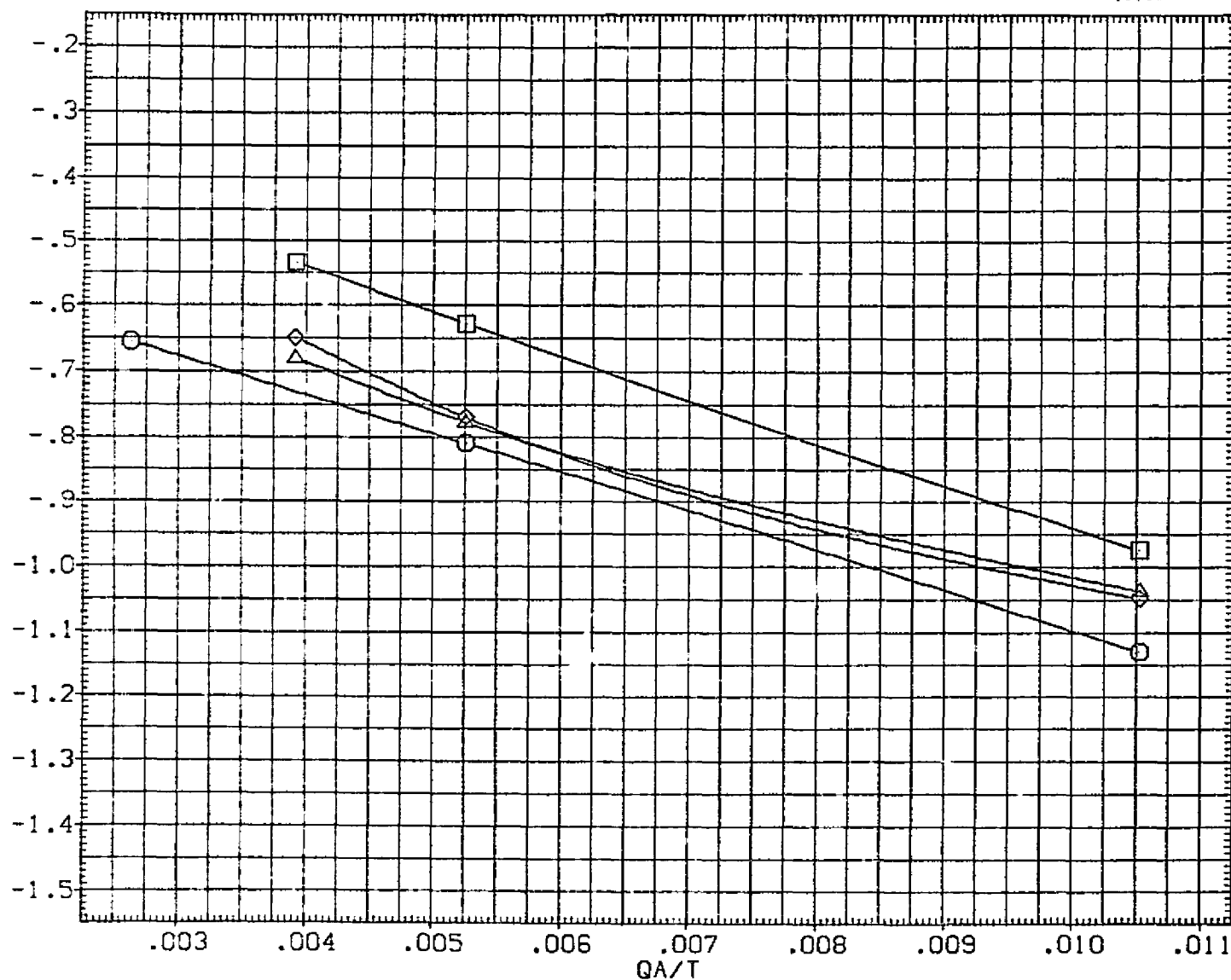


FIGURE 93. AREA RATIO EFFECTS, L/H DOWN FIRING JETS

(K) ALPHA = 15.00

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION
(SJA071)	□	01N31 LAMP CFHT 118 (MA-22)
(SJA072)	◇	01N34 LAMP CFHT 118 (MA-22)
(SJA073)	△	01N47 LAMP CFHT 118 (MA-22)
(SJA074)	○	01N43 LAMP CFHT 118 (MA-22)

ELEVON	NO. JET	BO FLAP	BETA	REFERENCE INFORMATION
.000	2.000	.000	.000	SREF 2690.0000 SC 1.
.000	2.000	.000	.000	LREF 174.8000 IN. LS
.000	2.000	.000	.000	BREF 103.6800 INCHES
.000	2.000	.000	.000	XMRP 1076.7000 IN. XC
.000	2.000	.000	.000	YMRP .0000 IN. YC
.000	2.000	.000	.000	ZMRP 375.0000 IN. ZC
.000	2.000	.000	.000	SCALE .0100

RCS JET AMPLIFICATION FACTOR - ROLL, N(RM)

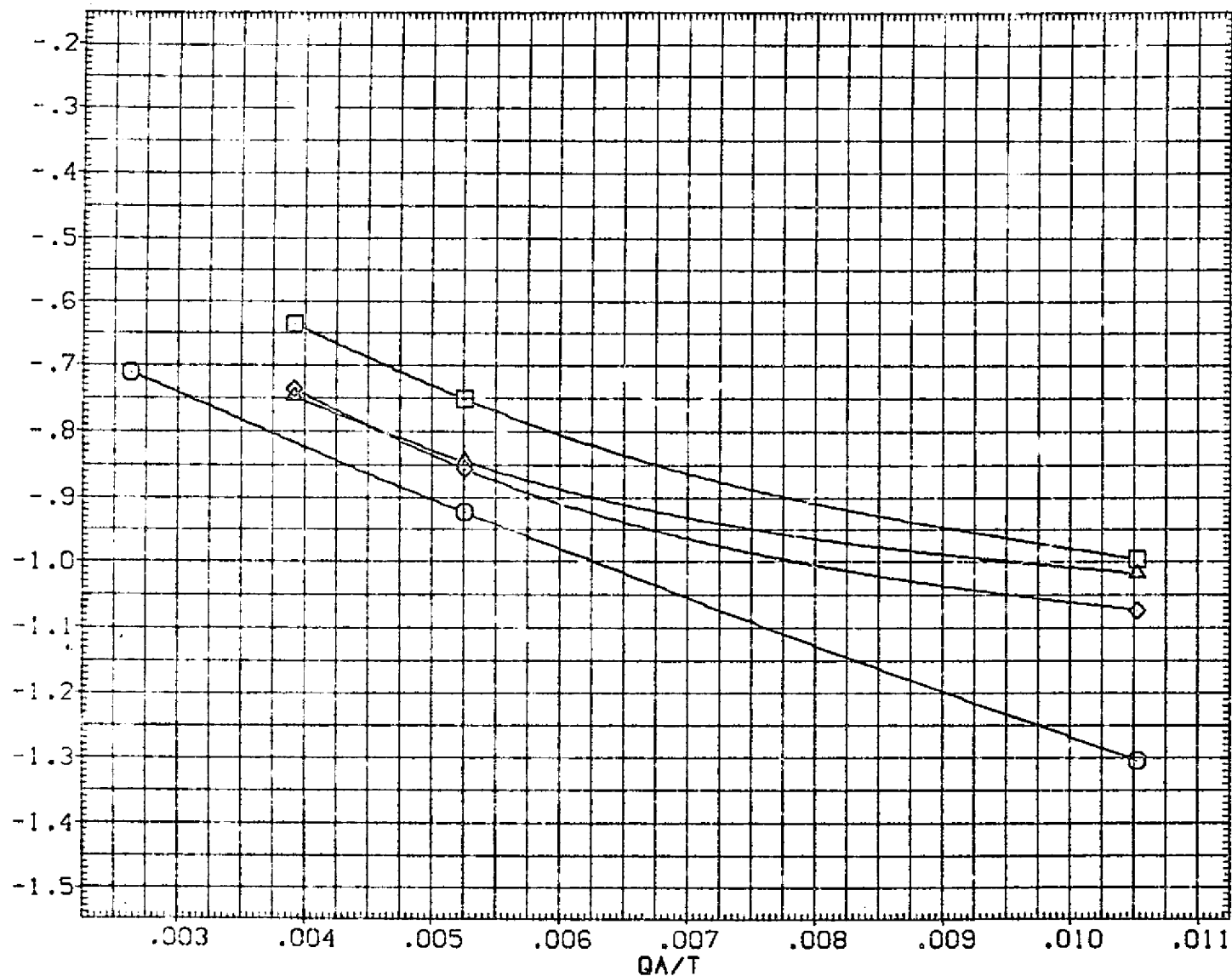


FIGURE 93. AREA RATIO EFFECTS, L/H DOWN FIRING JETS

(L) ALPHA = 20.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
[SJA071] □	01N31 LARC CFHT 118 (MA-22)
[SJA072] ◇	01N34 LARC CFHT 118 (MA-22)
[SJA073] △	01N47 LARC CFHT 118 (MA-22)
[SJA074] △	01N43 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BDFLAP	BETA	REFERENCE INFORMATION		
.000	2.000	.000	.000	SREF	2690.0000	SQ. FT.
.000	2.000	.000	.000	LREF	474.8000	INCHES
.000	2.000	.000	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - ROLL, NCRM

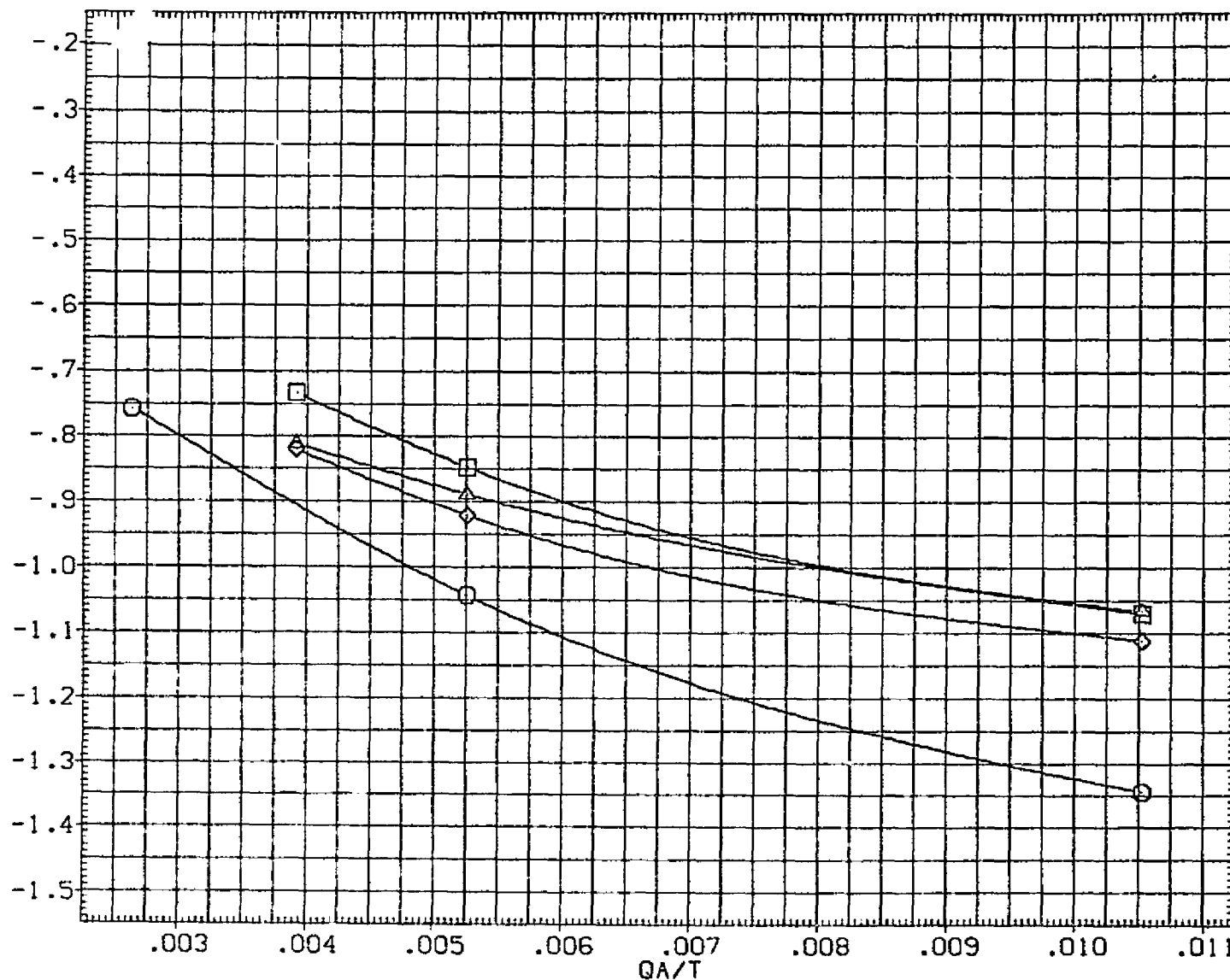


FIGURE 93. AREA RATIO EFFECTS, L/H DOWN FIRING JETS
(M) ALPHA = 25.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA071) □	01N31 LARC CPHT 118 (MA-22)
(SJA072) ○	01N34 LARC CPHT 118 (MA-22)
(SJA073) △	01N47 LARC CPHT 118 (MA-22)
(SJA074) ◇	01N43 LARC CPHT 118 (MA-22)

ELEVON	NO.JET	BDFLAP	BETA	REFERENCE INFORMATION		
.000	2.000	.000	.000	SREF	2690.0000	50.FT.
.000	2.000	.000	.000	LREF	474.0000	INC. 1
.000	2.000	.000	.000	BREF	936.6800	INC. 2
.000	2.000	.000	.000	XMRP	1076.7000	IN. 30
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.0100	

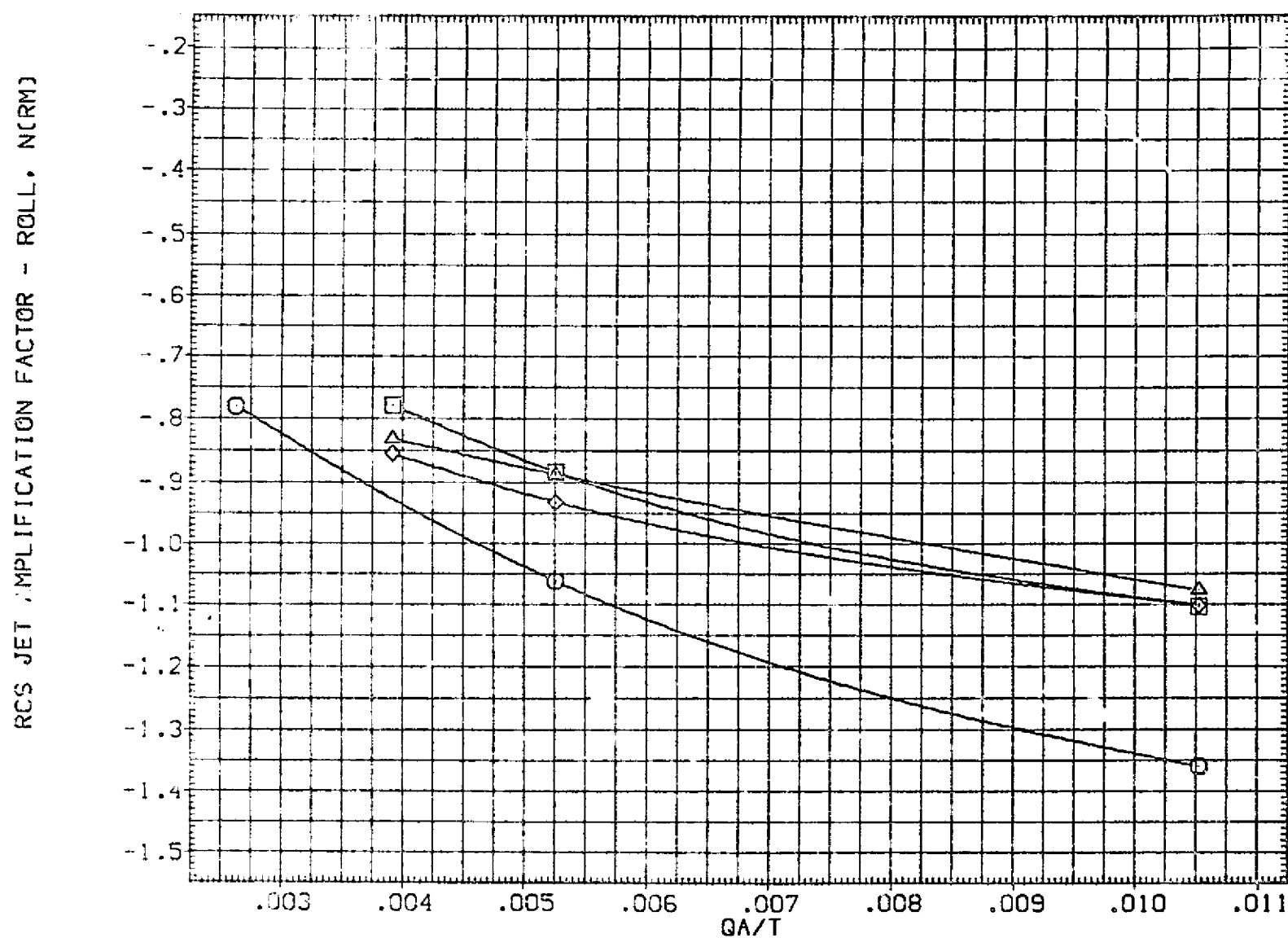


FIGURE 93. AREA RATIO EFFECTS, L/H DOWN FIRING JETS
(N)ALPHA = 30.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA071)	01N31 LARC CFHT 118 (MA-22)
(SJA072)	01N34 LARC CFHT 118 (MA-22)
(SJA073)	01N47 LARC CFHT 118 (MA-22)
(SJA074)	01N43 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BD FLAP	BETA	REFERENCE INFORMATION
.000	2.000	.000	.000	SREF 2690.0000 SQ. FT.
.000	2.000	.000	.000	LREF 474.8000 INCHES
.000	2.000	.000	.000	BREF 936.6800 INCHES
.000	2.000	.000	.000	XMRP 1076.7000 IN. X0
				YMRP .0000 IN. Y0
				ZMRP 375.0000 IN. Z0
				SCALE .0100

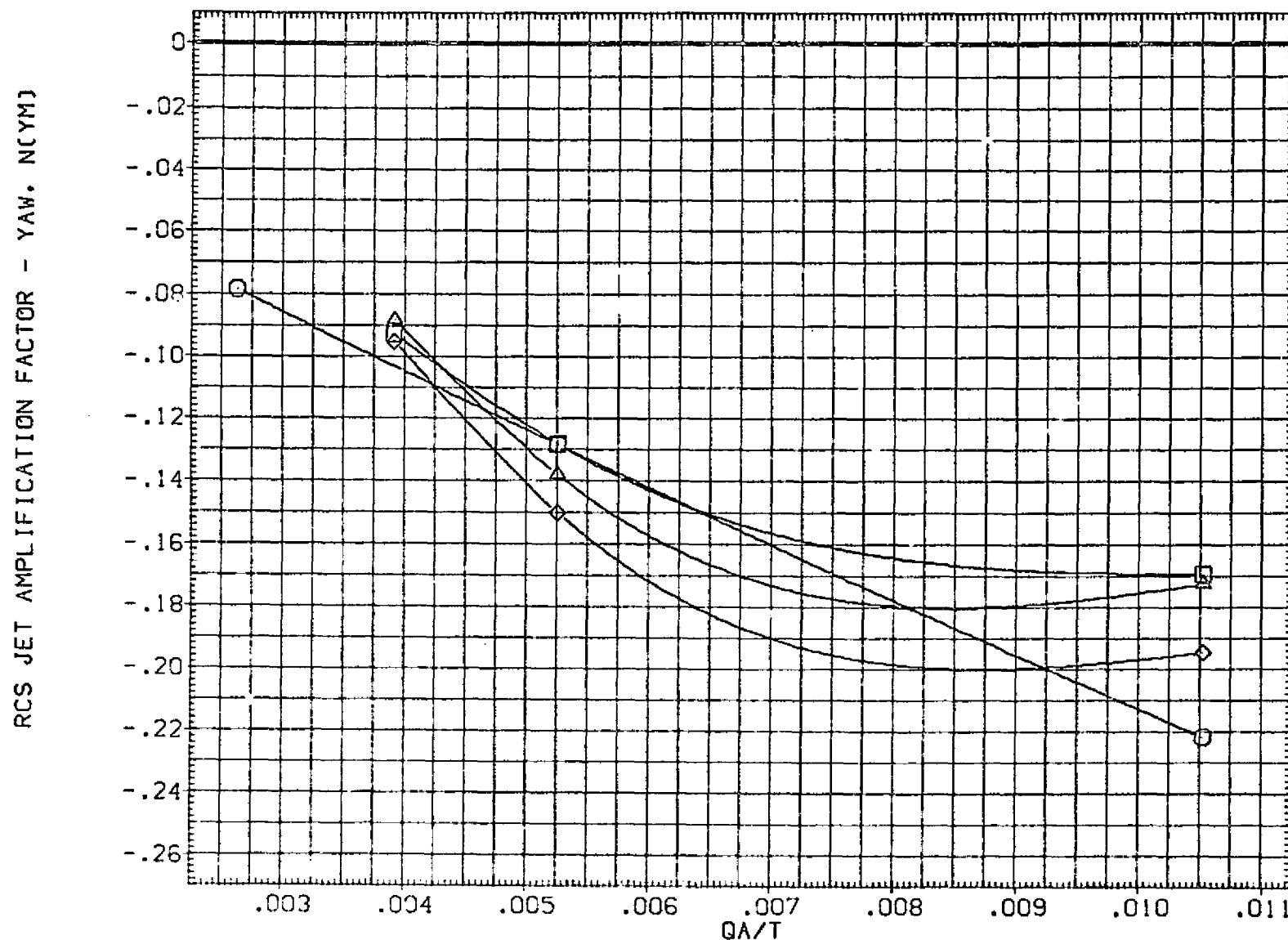


FIGURE 93. AREA RATIO EFFECTS, L/H DOWN FIRING JETS
(A) ALPHA = -8.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA071)	QIN31 L/RP CFHT 118 (MA-22)
(SJA072)	QIN34 L/RP CFHT 118 (MA-22)
(SJA073)	QIN47 L/RP CFHT 118 (MA-22)
(SJA074)	QIN43 L/RP CFHT 118 (MA-22)

ELEVON	NO. JET	BD FLAP	BETA	REFERENCE INFORMATION
.000	2.000	.000	.000	SREF 3500.0000 SQ. FT.
.000	2.000	.000	.000	LREF 474.8000 INCHES
.000	2.000	.000	.000	BREF 36.6800 INCHES
.000	2.000	.000	.000	YMRP 376.7000 IN. X0
.000	2.000	.000	.000	YMRP .0000 IN. Y0
.000	2.000	.000	.000	ZMRP 375.0000 IN. Z0
.000	2.000	.000	.000	KALE .0000

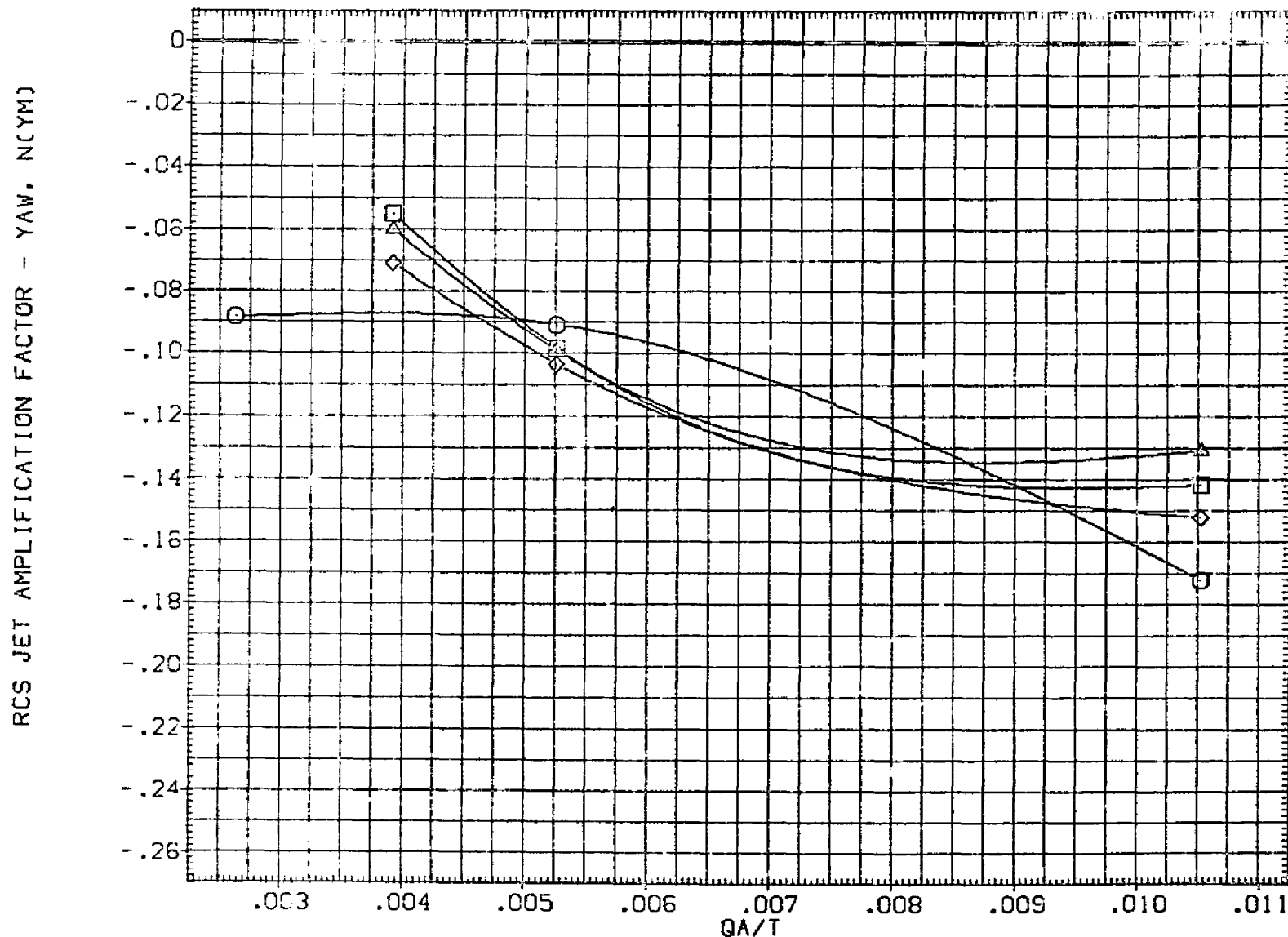


FIGURE 93. AREA RATIO EFFECTS, L/H DOWN FIRING JETS

(B) ALPHA = -6.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA071)	01N31 LARC CFHT 118 (MA-22)
(SJA072)	01N34 LARC CFHT 118 (MA-22)
(SJA073)	01N47 LARC CFHT 118 (MA-22)
(SJA074)	01N43 LARC CFHT 118 (MA-22)

ELEVON	NO.JET	BDFLAP	BETA	REFERENCE INFORMATION		
.000	2.000	.000	.000	SREF	2690.0000	50.FT.
.000	2.000	.000	.000	LREF	474.8000	INCHES
.000	2.000	.000	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. XD
				YMRP	.0000	IN. YD
				ZMRP	375.0000	IN. ZD
				SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - YAW, NCYM

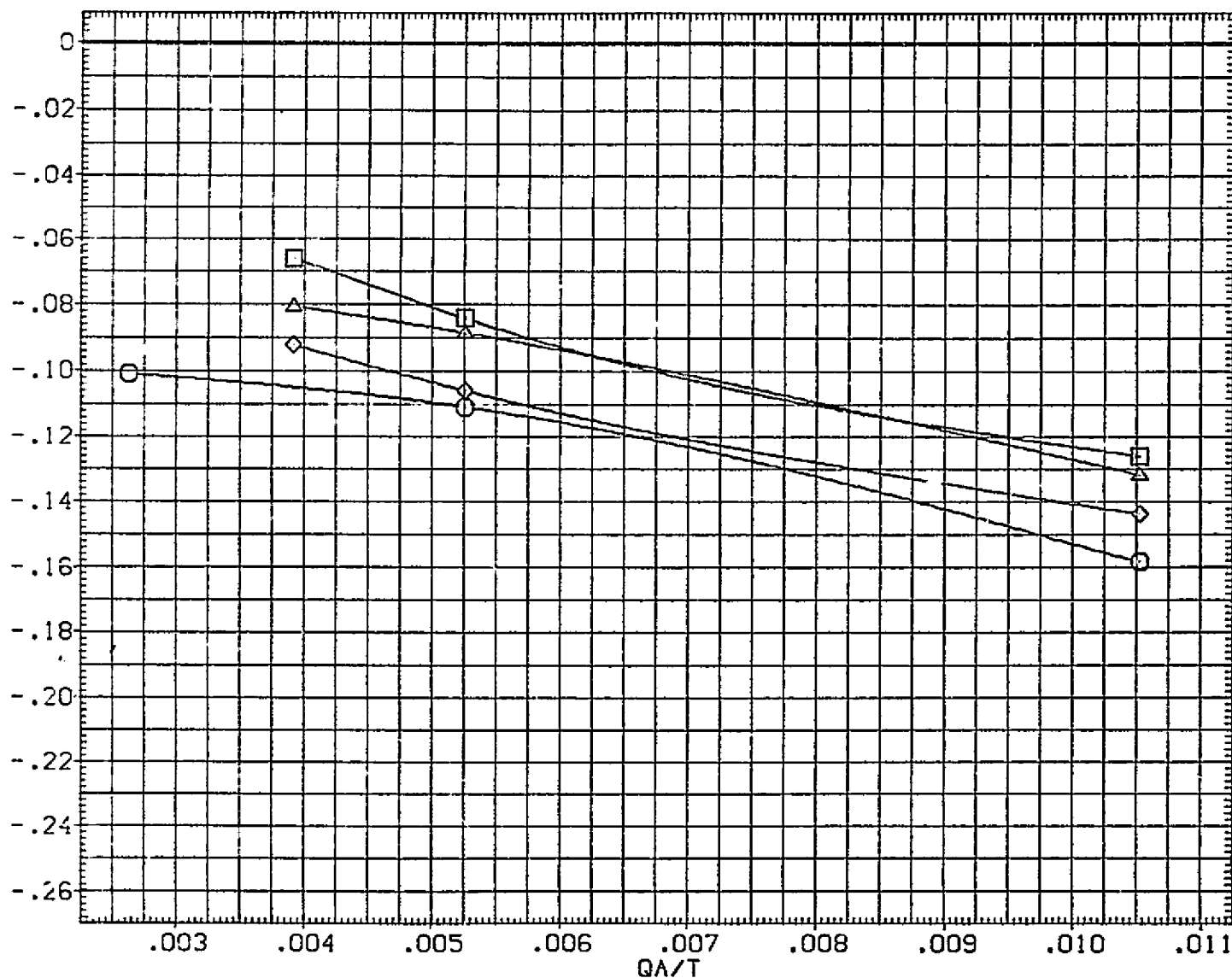


FIGURE 93. AREA RATIO EFFECTS, L/H DOWN FIRING JETS
(C) ALPHA = -4.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA071)	01N31 LARC CFHT 118 (MA-22)
(SJA072)	01N34 LARC CFHT 118 (MA-22)
(SJA073)	01N47 LARC CFHT 118 (MA-22)
(SJA074)	01N43 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BD FLAP	BETA	REFERENCE INFORMATION
.000	2.000	.000	.000	SREF 2690.0000 SQ. FT.
.000	2.000	.000	.000	LREF 474.8000 INCHES
.000	2.000	.000	.000	BREF 936.6800 INCHES
.000	2.000	.000	.000	XMRP 1076.7000 IN. X0
				YMRP .0000 IN. Y0
				ZMRP 375.0000 IN. Z0
				SCALE .0100

RCS JET AMPLIFICATION FACTOR - YAW, NCM)

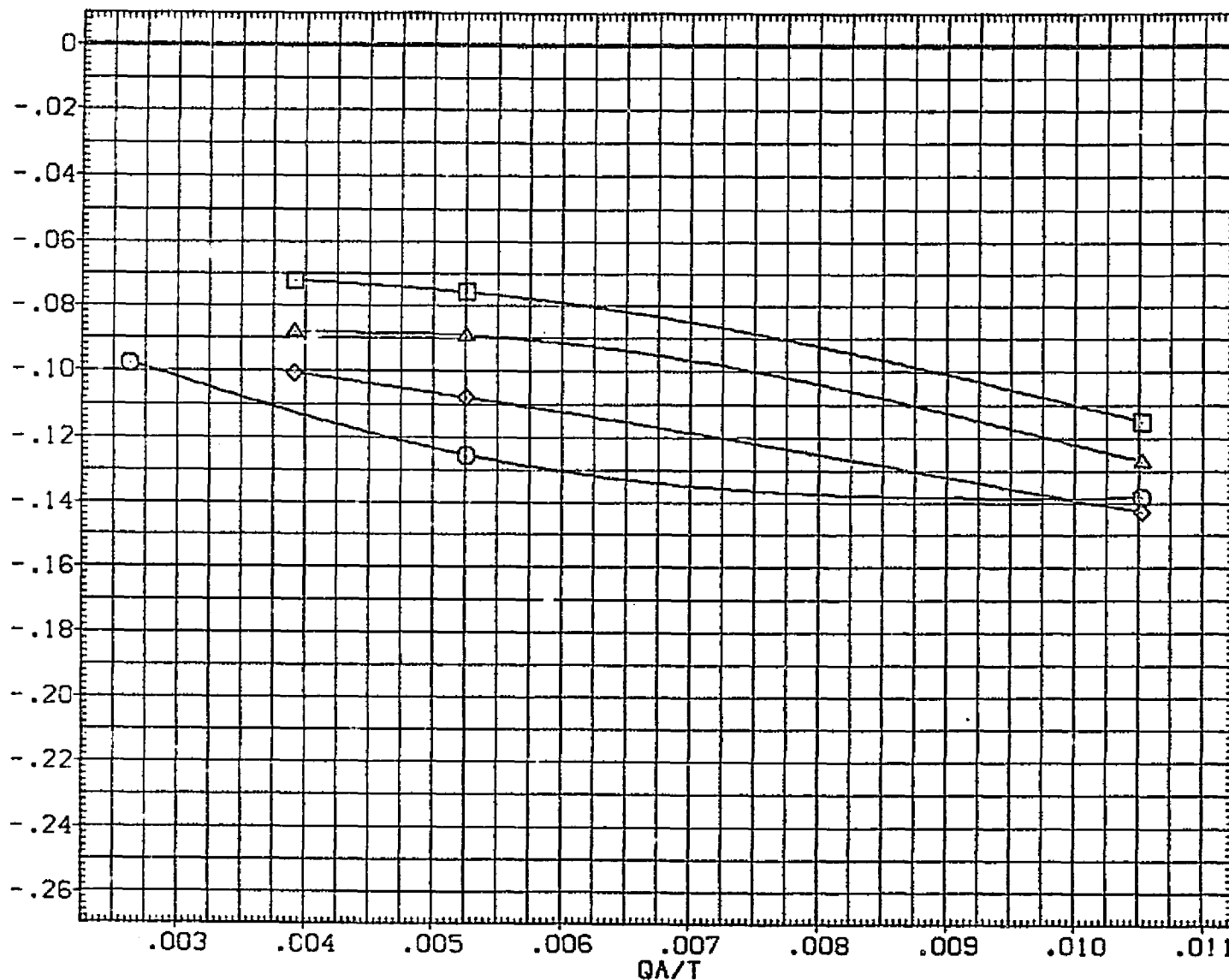


FIGURE 93. AREA RATIO EFFECTS, L/H DOWN FIRING JETS

(D) ALPHA = -2.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA071)	01N31 LARC CFHT 118 (MA-22)
(SJA072)	01N34 LARC CFHT 118 (MA-22)
(SJA073)	01N47 LARC CFHT 118 (MA-22)
(SJA074)	01N43 LARC CFHT 118 (MA-22)

ELEVON	NO.JET	BOFLAP	BETA	REFERENCE INFORMATION		
.000	2.000	.000	.000	SREF	2690.0000	SQ.FT.
.000	2.000	.000	.000	LREF	474.8000	INCHES
.000	2.000	.000	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XMHP	1076.7000	IN. X0
				YMHP	.0000	IN. Y0
				ZMHP	375.0000	IN. Z0
				SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - YAW, N(YM)

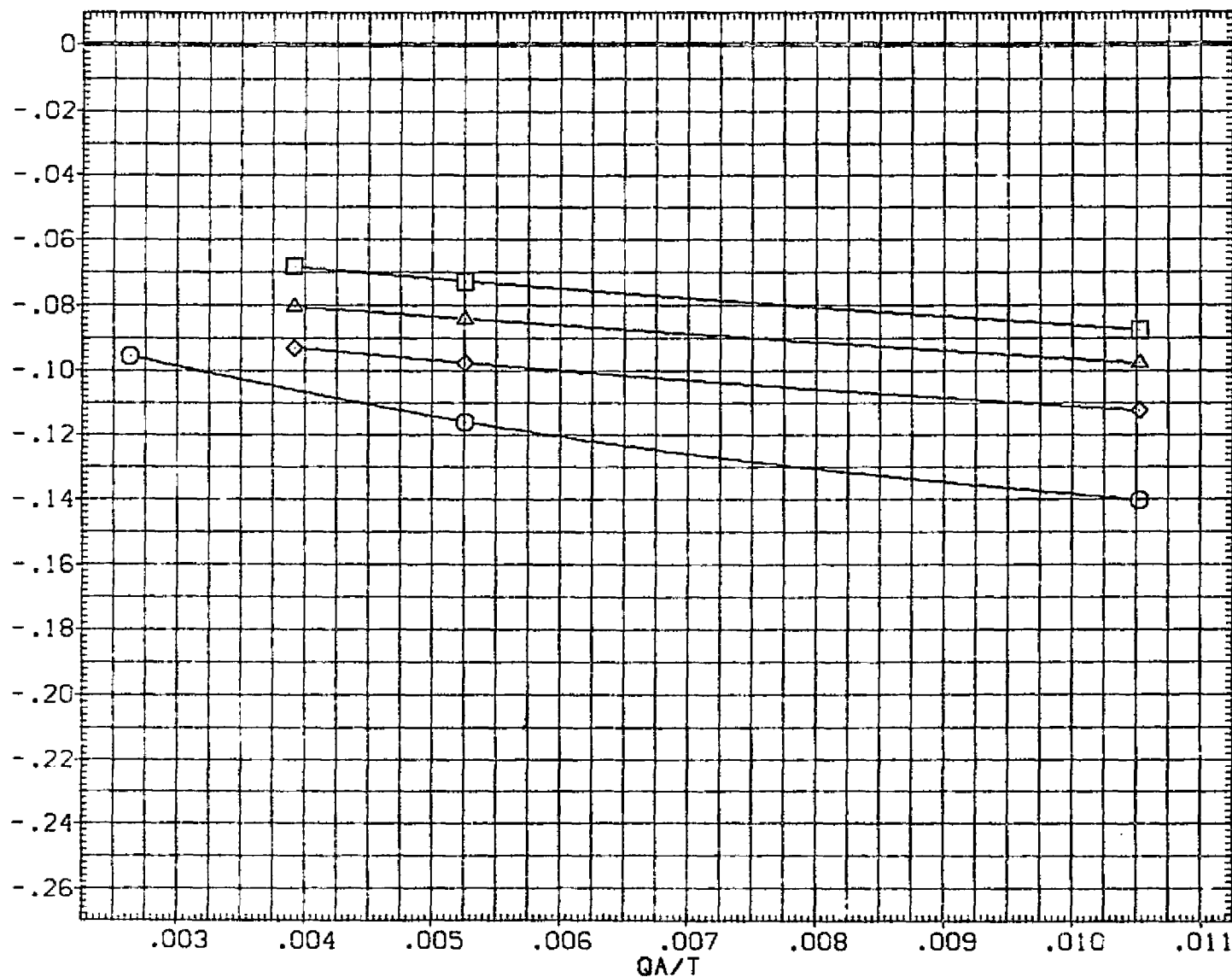


FIGURE 93. AREA RATIO EFFECTS, L/H DOWN FIRING JETS

(E) ALPHA = .00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA071)	01N31 LARC CFHT 118 (MA-22)
(SJA072)	01N34 LARC CFHT 118 (MA-22)
(SJA073)	01N47 LARC CFHT 118 (MA-22)
(SJA074)	01N43 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BD FLAP	BETA	REFERENCE INFORMATION
.000	2.000	.000	.000	SREF .890.0000 50. FT.
.000	2.000	.000	.000	LREF .474.8000
.000	2.000	.000	.000	BREF .918.6800
.000	2.000	.000	.000	XMRP 1076.7000
.000	2.000	.000	.000	YMRP .0000
.000	2.000	.000	.000	ZMRP 375.0000
.000	2.000	.000	.000	SCALE .0100

RCS JET AMPLIFICATION FACTOR - YAW, NCYM

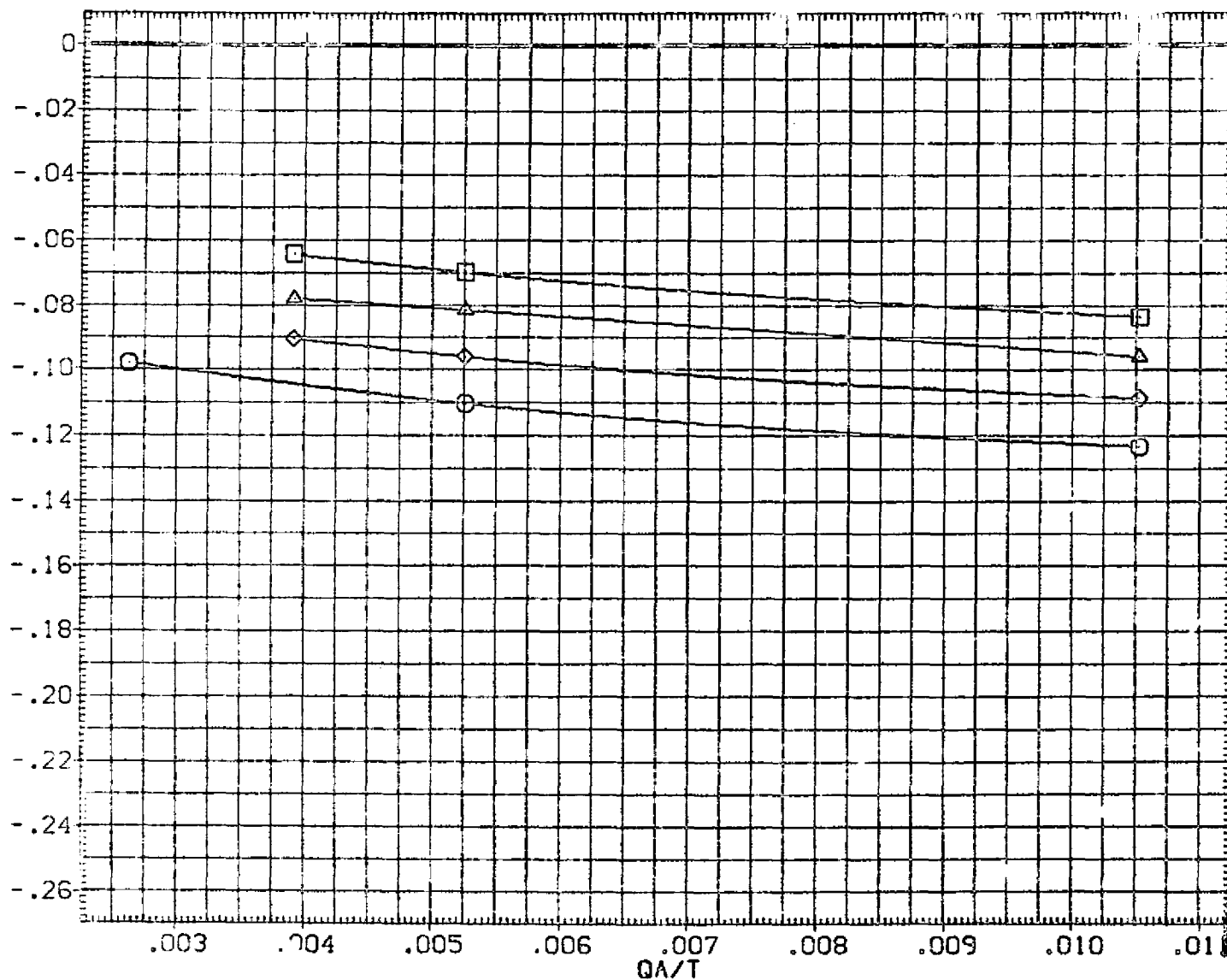


FIGURE 93. AREA RATIO EFFECTS, L/H DOWN FIRING JETS

(F) ALPHA = 2.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA071)	QIN31 LARC CFHT 118 (MA-22)
(SJA072)	QIN34 LARC CFHT 118 (MA-22)
(SJA073)	QIN47 LARC CFHT 118 (MA-22)
(SJA074)	QIN43 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BD FLAP	BETA	REFERENCE INFORMATION		
.000	2.000	.000	.000	SREF	2690.0000	50. FT.
.000	2.000	.000	.000	LREF	474.8000	INCHES
.000	2.000	.000	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.0100	

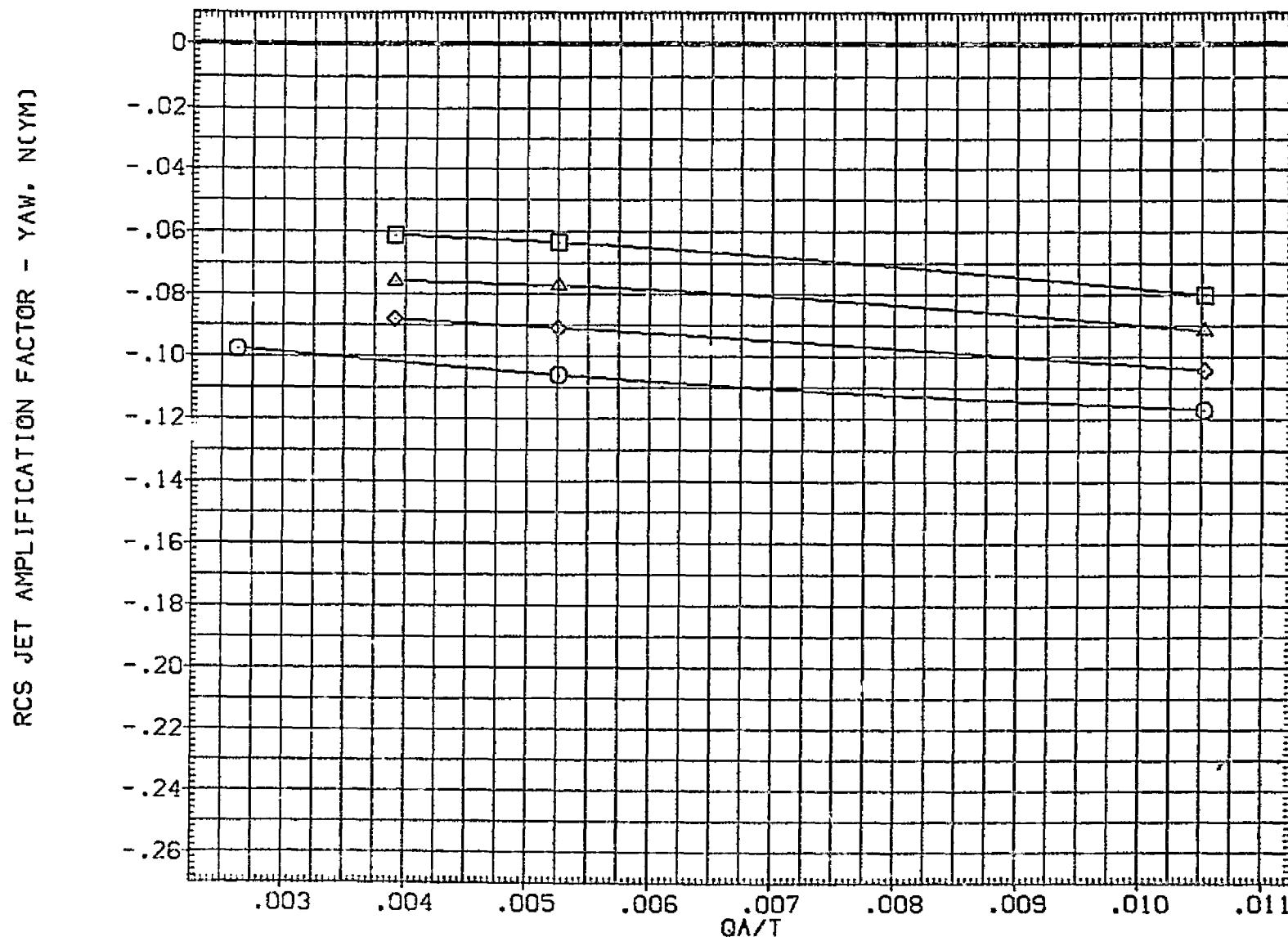


FIGURE 93. AREA RATIO EFFECTS, L/H DOWN FIRING JETS
(G) ALPHA = 4.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA071)	01N31 LARC CFHT 118 (MA-22)
(SJA072)	01N34 LARC CFHT 118 (MA-22)
(SJA073)	01N47 LARC CFHT 118 (MA-22)
(SJA074)	01N43 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BD FLAP	BETA	REFERENCE INFORMATION
.000	2.000	.000	.000	SREF 390.0000 SQ. FT.
.000	2.000	.000	.000	LREF 474.8000 INCHES
.000	2.000	.000	.000	BREF 506.6800 INCHES
.000	2.000	.000	.000	1MRP 176.7000 IN. 10
.000	2.000	.000	.000	2MRP .0000 IN. 10
.000	2.000	.000	.000	SCALE 375.0000 IN. 20

RCS JET AMPLIFICATION FACTOR - YAW, NCYM

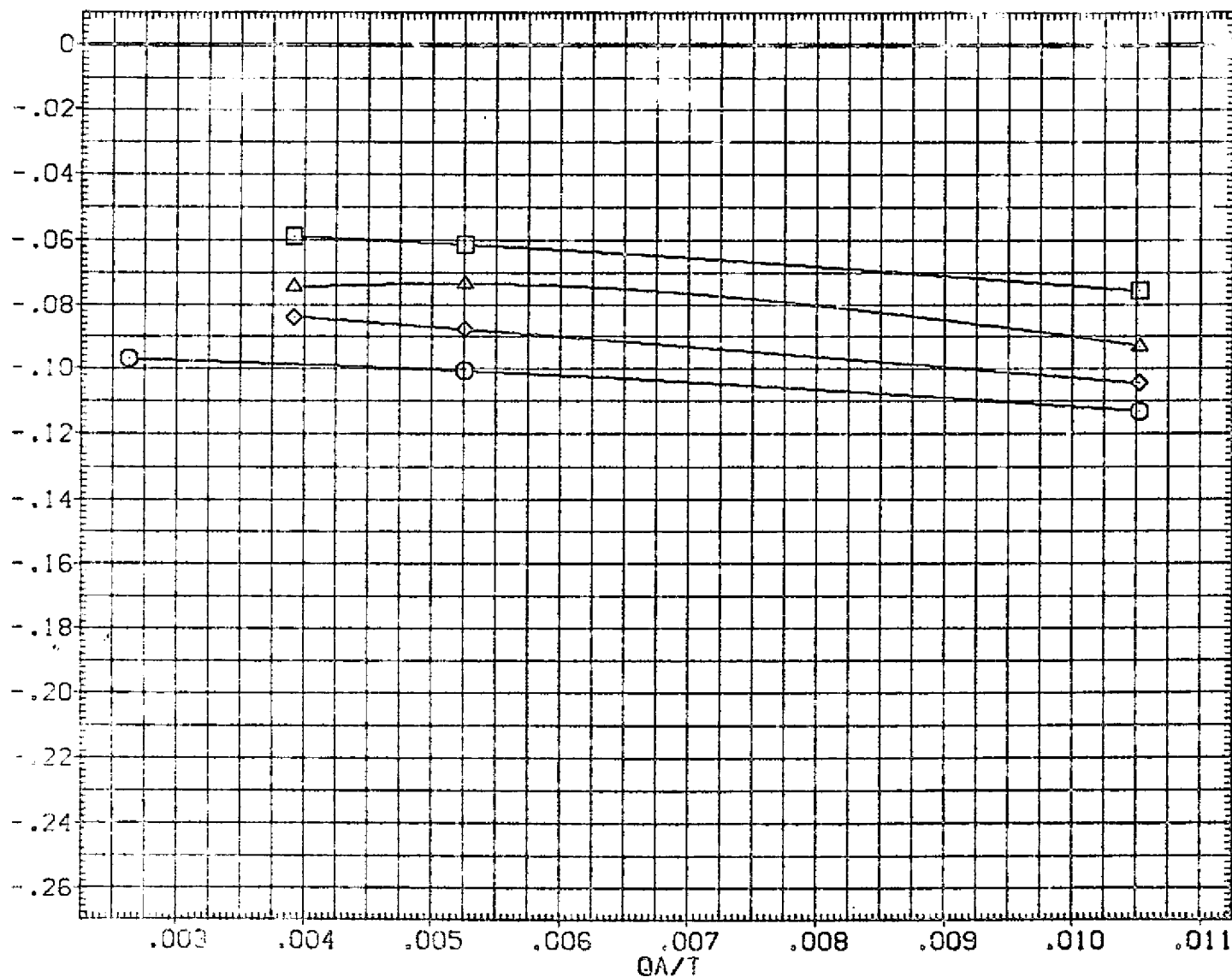


FIGURE 93. AREA RATIO EFFECTS, L/H DOWN FIRING JETS

(H) ALPHA = 6.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA071)	01N31 LARC CFHT 118 (MA-22)
(SJA072)	01N34 LARC CFHT 118 (MA-22)
(SJA073)	01N47 LARC CFHT 118 (MA-22)
(SJA074)	01N43 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BD FLAP	BETA	REFERENCE INFORMATION
.000	2.000	.000	.000	SREF 2690.0000 SQ. FT.
.000	2.000	.000	.000	LREF 474.8000 INCHES
.000	2.000	.000	.000	BREF 936.6800 INCHES
.000	2.000	.000	.000	XMRP 1076.7000 IN. X0
				YMRP .0000 IN. Y0
				ZMRP 375.0000 IN. Z0
				SCALE .0100

RCS JET AMPLIFICATION FACTOR - YAW, N(YM)

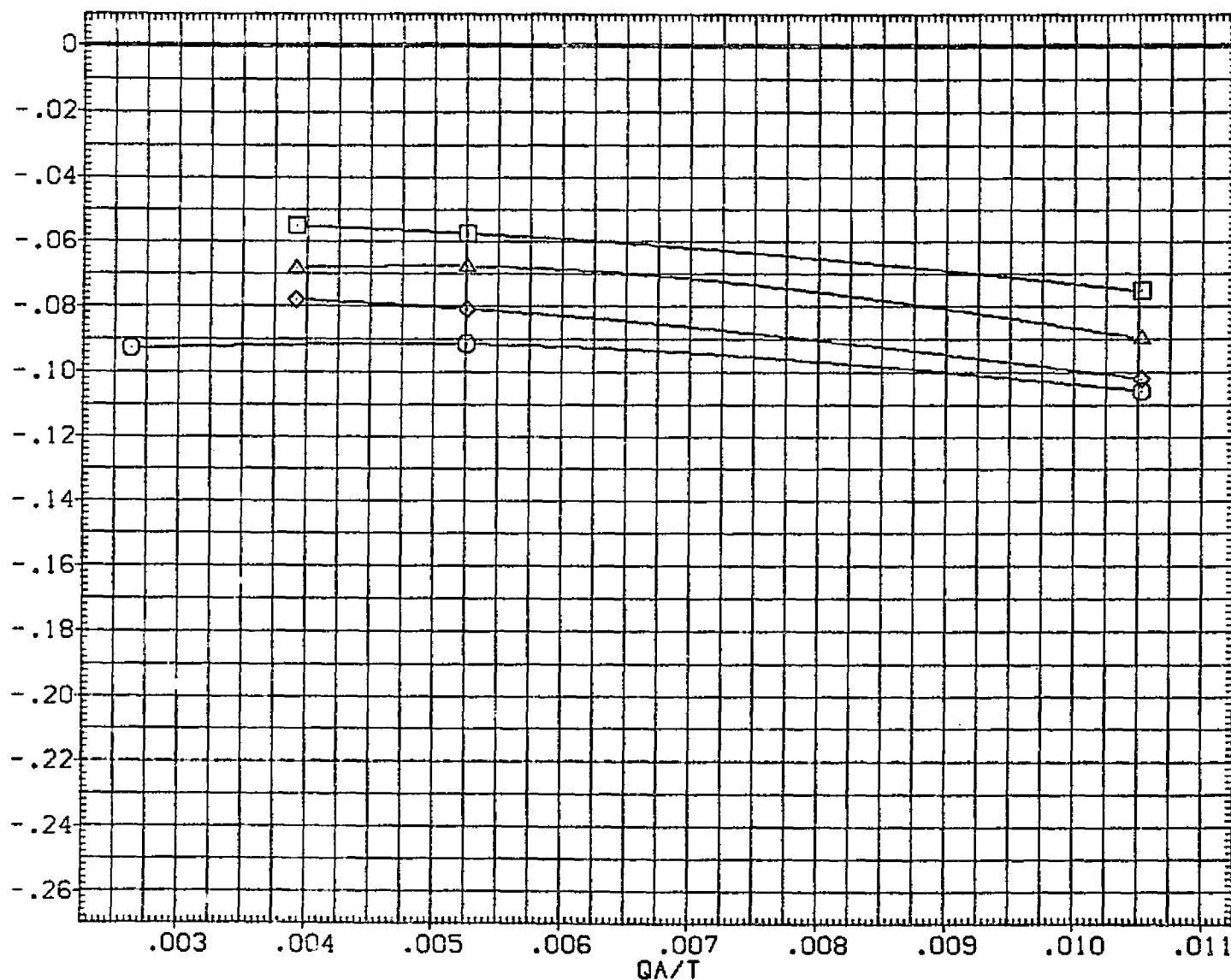


FIGURE 93. AREA RATIO EFFECTS, L/H DOWN FIRING JETS

(I) ALPHA = 8.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA071)	01N31 LARC CFHT 118 (MA-22)
(SJA072)	01N34 LARC CFHT 118 (MA-22)
(SJA073)	01N47 LARC CFHT 118 (MA-22)
(SJA074)	01N43 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BD FLAP	BETA	REFERENCE INFORMATION
.000	2.000	.000	.000	SREF 2590.0000 SQ. FT.
.000	2.000	.000	.000	LREF 474.8000 INCHES
.000	2.000	.000	.000	BREF 306.6800 INCHES
.000	2.000	.000	.000	XMRP 1076.7000 IN. X0
				YMRP .0000 IN. Y0
				ZMRP 375.0000 IN. Z0
				SCALE .0100

RCS JET AMPLIFICATION FACTOR - YAW, NCM

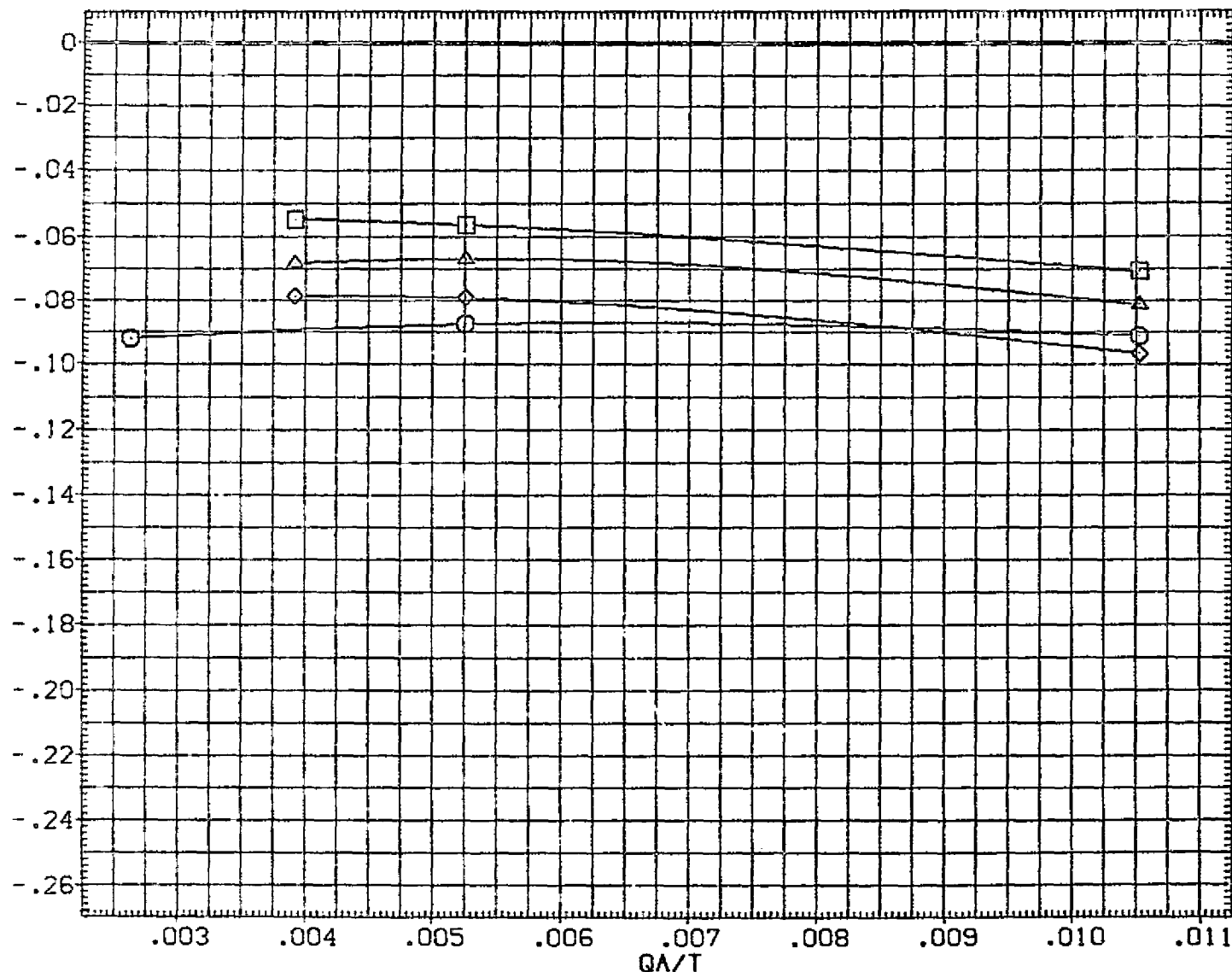


FIGURE 93. AREA RATIO EFFECTS, L/H DOWN FIRING JETS
(J)ALPHA = 10.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	NO. JET	BD FLAP	BETA	REFERENCE INFORMATION		
(SJA071)	Q1N31 LARC CFHT 118 (MA-22)	.000	2.000	.000	.000	SREF	2690.0000	90. FT.
(SJA072)	Q1N34 LARC CFHT 118 (MA-22)	.000	2.000	.000	.000	LREF	474.9000	INCHES
(SJA073)	Q1N47 LARC CFHT 118 (MA-22)	.000	2.000	.000	.000	BREF	936.6800	INCHES
(SJA074)	Q1N43 LARC CFHT 118 (MA-22)	.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
						YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - YAW, NCYM)

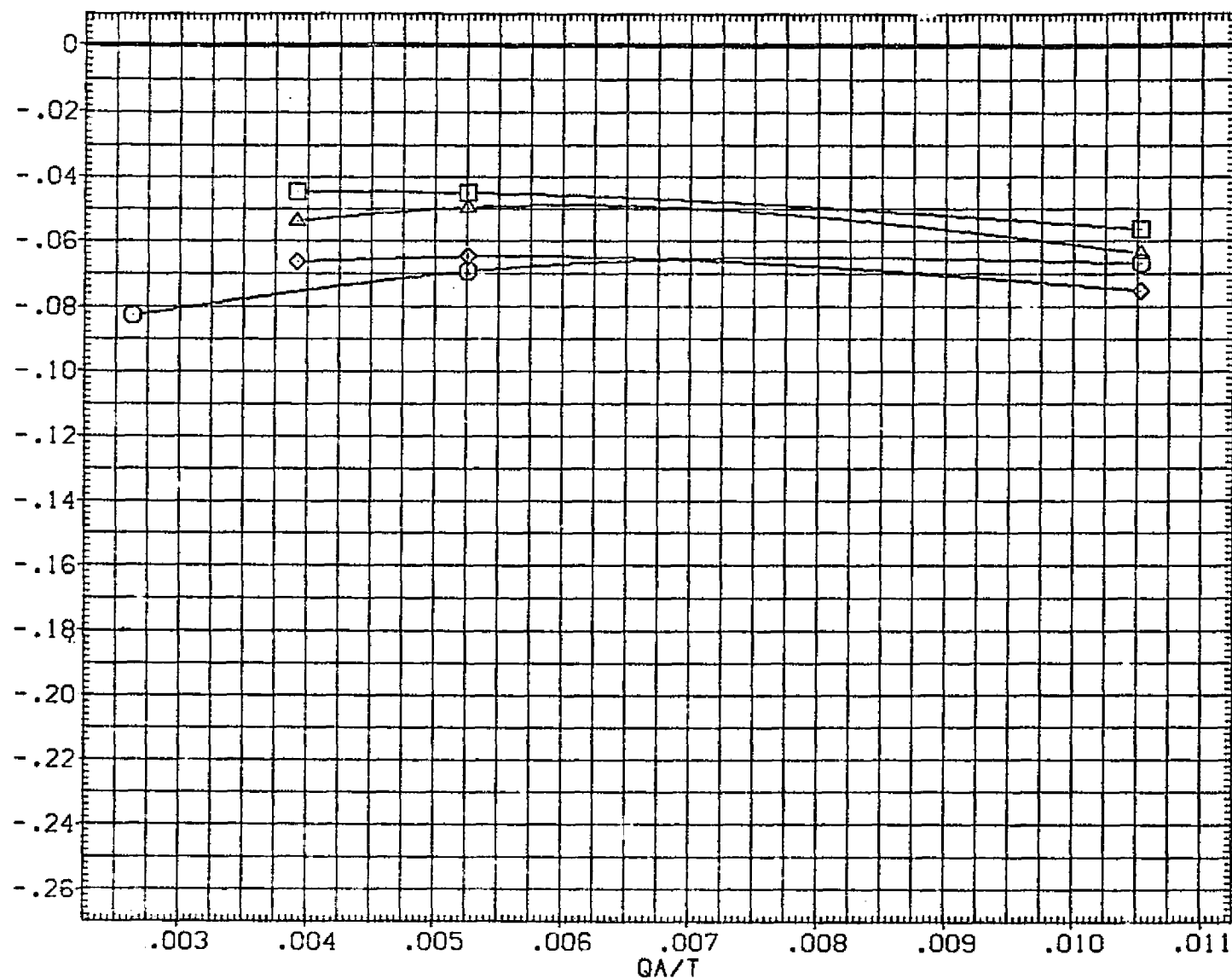


FIGURE 93. AREA RATIO EFFECTS, L/H DOWN FIRING JETS
(K) ALPHA = 15.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA071)	01N31 LARC CFHT 118 (MA-22)
(SJA072)	01N34 LARC CFHT 118 (MA-22)
(SJA073)	01N47 LARC CFHT 118 (MA-22)
(SJA074)	01N43 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BOFLAP	BETA	REFERENCE INFORMATION
.000	2.000	.000	.000	SREF 2690.0000 SQ. FT.
.000	2.000	.000	.000	LREF 474.8000 INCHES
.000	2.000	.000	.000	SREF 936.6800 INCHES
.000	2.000	.000	.000	XMRP 1076.7000 IN. X0
				YMRP .0000 IN. Y0
				ZMRP 375.0000 IN. Z0
				SCALE .0100

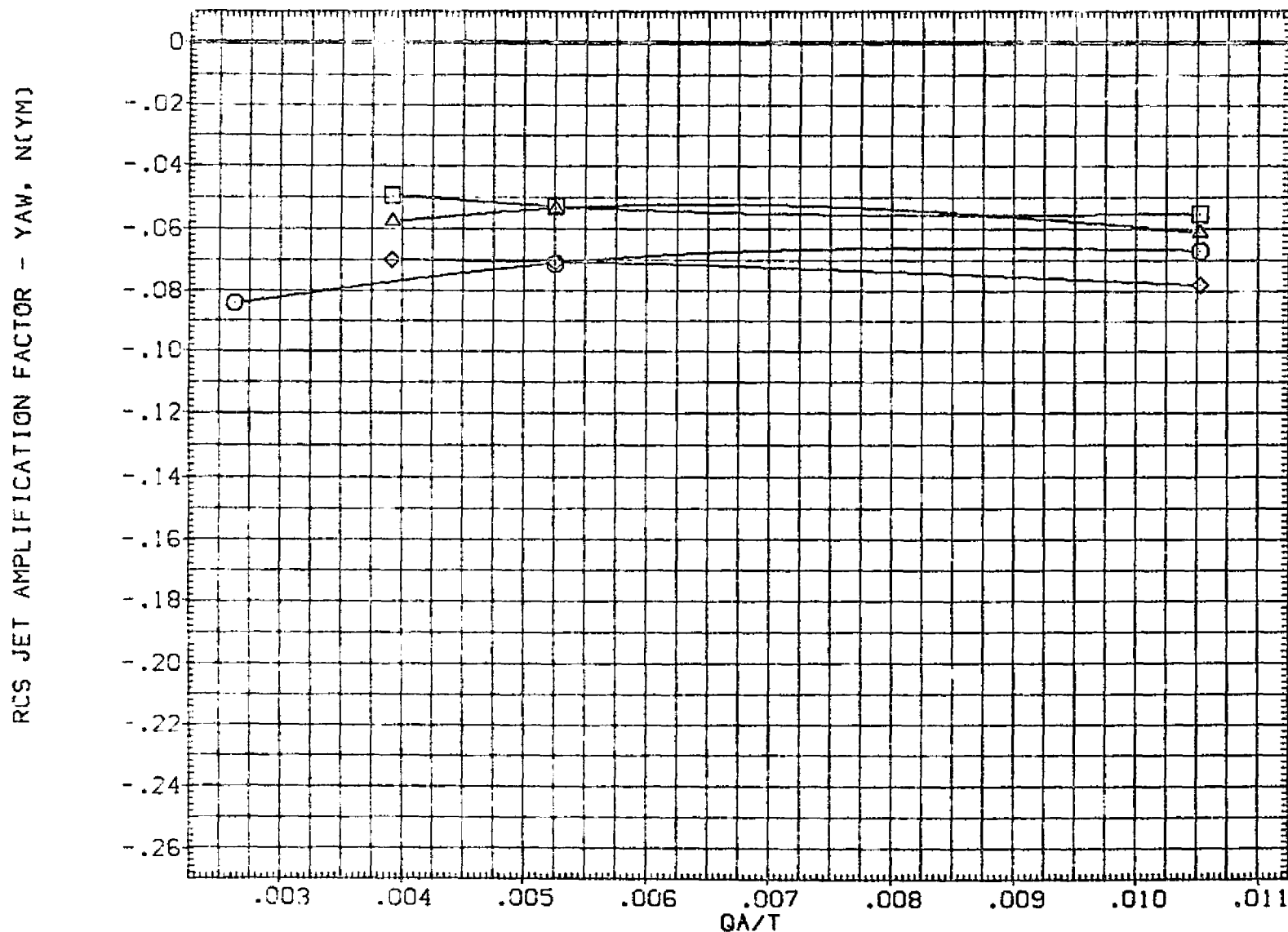


FIGURE 93. AREA RATIO EFFECTS, L/H DOWN FIRING JETS

(L) ALPHA = 20.00

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(SJA071) □ 01N31 LARC CFHT 118 (MA-22)
 (SJA072) ◇ 01N34 LARC CFHT 118 (MA-22)
 (SJA073) △ 01N47 LARC CFHT 118 (MA-22)
 (SJA074) × 01N43 LARC CFHT 118 (MA-22)

ELEVON

NO. JET

BD FLAP

BETA

REFERENCE INFORMATION

.000	2.000	.000	.000	SREF	2690.0000	50. FT.
.000	2.000	.000	.000	LREF	474.8000	INCHES
.000	2.000	.000	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - YAW, N(YM)

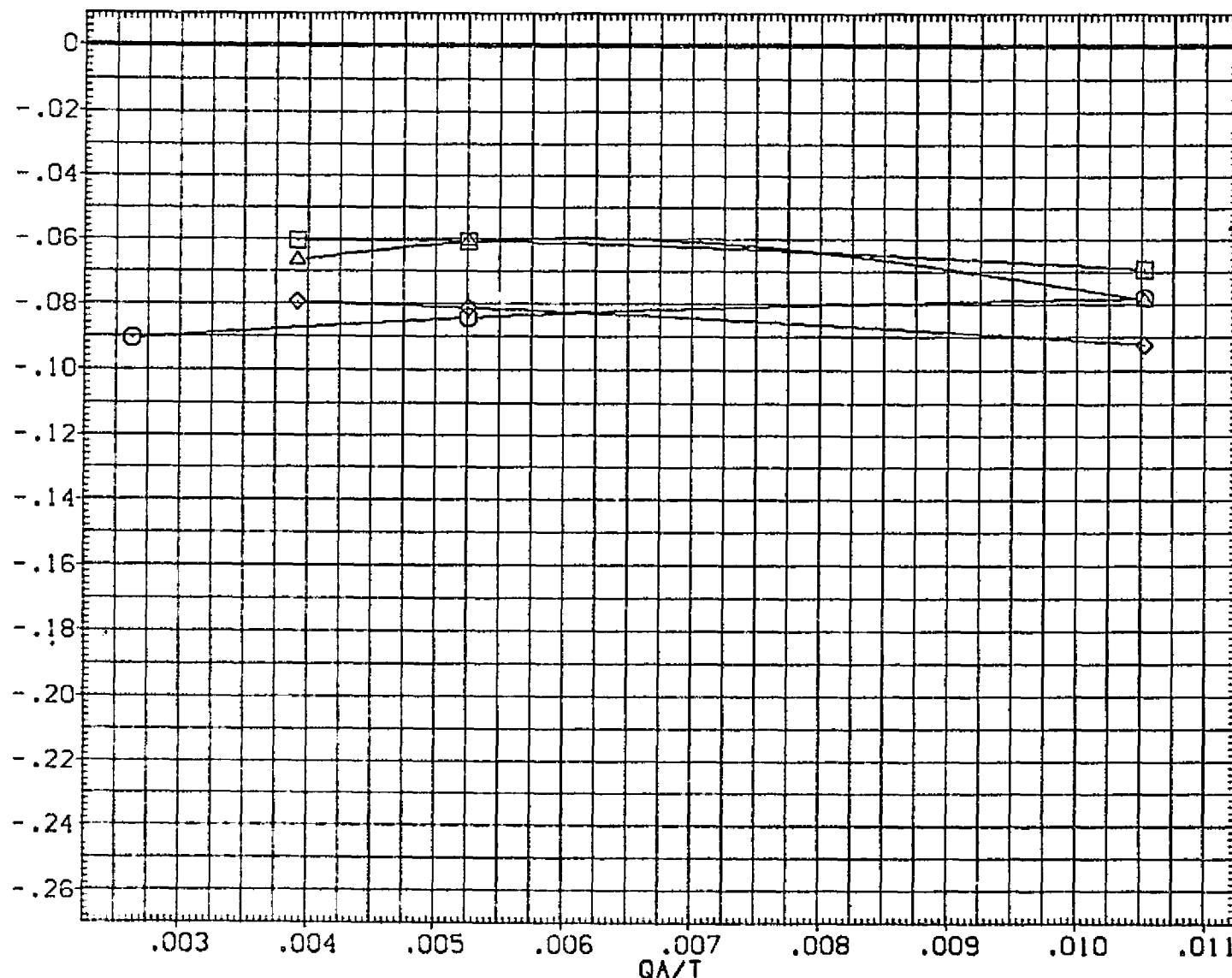


FIGURE 93. AREA RATIO EFFECTS, L/H DOWN FIRING JETS

(M) ALPHA = 25.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA071)	01N31 LARC CFHT 118 (MA-22)
(SJA072)	01N34 LARC CFHT 118 (MA-22)
(SJA073)	01N47 LARC CFHT 118 (MA-22)
(SJA074)	01N43 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BOFLAP	BETA	REFERENCE INFORMATION
.000	2.000	.000	.000	SREF 2690.0000 SQ. FT.
.000	2.000	.000	.000	LREF 474.8000 INCHES
.000	2.000	.000	.000	BREF 936.6800 INCHES
.000	2.000	.000	.000	VMRP 1076.7000 IN. X0
				VMRP .0000 IN. Y0
				ZMRP 375.0000 IN. Z0
				SCALE .0100

RCS JET AMPLIFICATION FACTOR - YAW, N(YM)

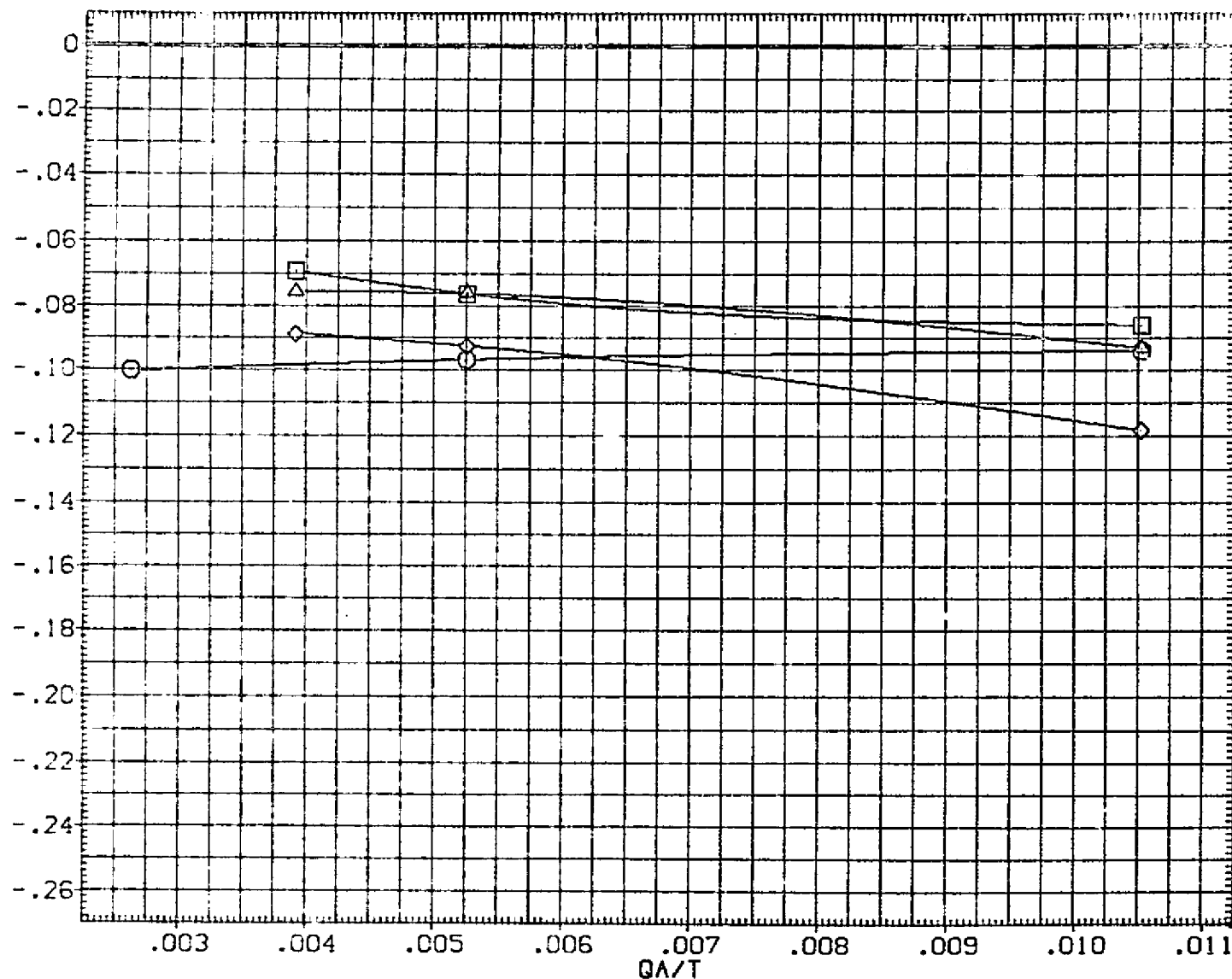


FIGURE 93. AREA RATIO EFFECTS, L/H DOWN FIRING JETS

(N)ALPHA = 30.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA071)	01N31 LARC CFHT 118 (MA-22)
(SJA072)	01N34 LARC CFHT 118 (MA-22)
(SJA073)	01N47 LARC CFHT 118 (MA-22)
(SJA074)	01N43 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BD FLAP	BETA	REFERENCE INFORMATION
.000	2.000	.000	.000	SREF 2690.0000 SQ. FT.
.000	2.000	.000	.000	LREF 474.8000 INCHES
.000	2.000	.000	.000	BREF 936.6800 INCHES
.000	2.000	.000	.000	XMRP 1076.7000 IN. X0
				YMRP .0000 IN. Y0
				ZMRP 375.0000 IN. Z0
				SCALE .0100

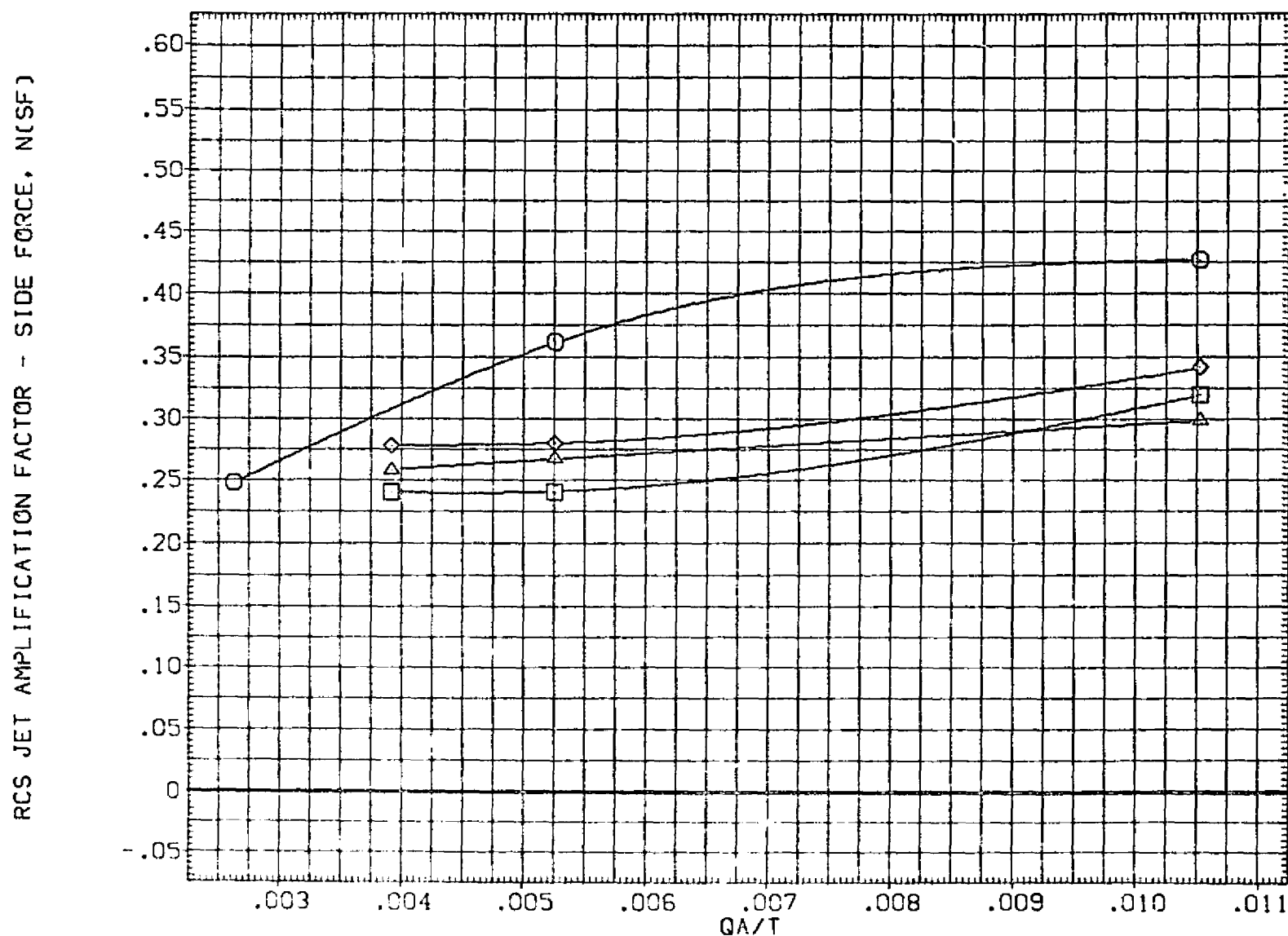


FIGURE 93. AREA RATIO EFFECTS, L/H DOWN FIRING JETS

(A) ALPHA = -8.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA071)	GIN31 LARC CPHT 118 (MA-22)
(SJA072)	GIN34 LARC CPHT 118 (MA-22)
(SJA073)	GIN47 LARC CPHT 118 (MA-22)
(SJA074)	GIN43 LARC CPHT 118 (MA-22)

ELEVON	NO. JET	BOFLAP	BETA	REFERENCE INFORMATION
.000	2.000	.000	.000	SREF 2690.0000 SQ. FT.
.000	2.000	.000	.000	LREF 474.8000 INCHES
.000	2.000	.000	.000	BREF 136.6800 INCHES
.000	2.000	.000	.000	YMRP 1076.7000 IN. 10
.000	2.000	.000	.000	ZMRP 375.0000 IN. 20
				SCALE .0100

RCS JET AMPLIFICATION FACTOR - SIDE FORCE, N(SF)

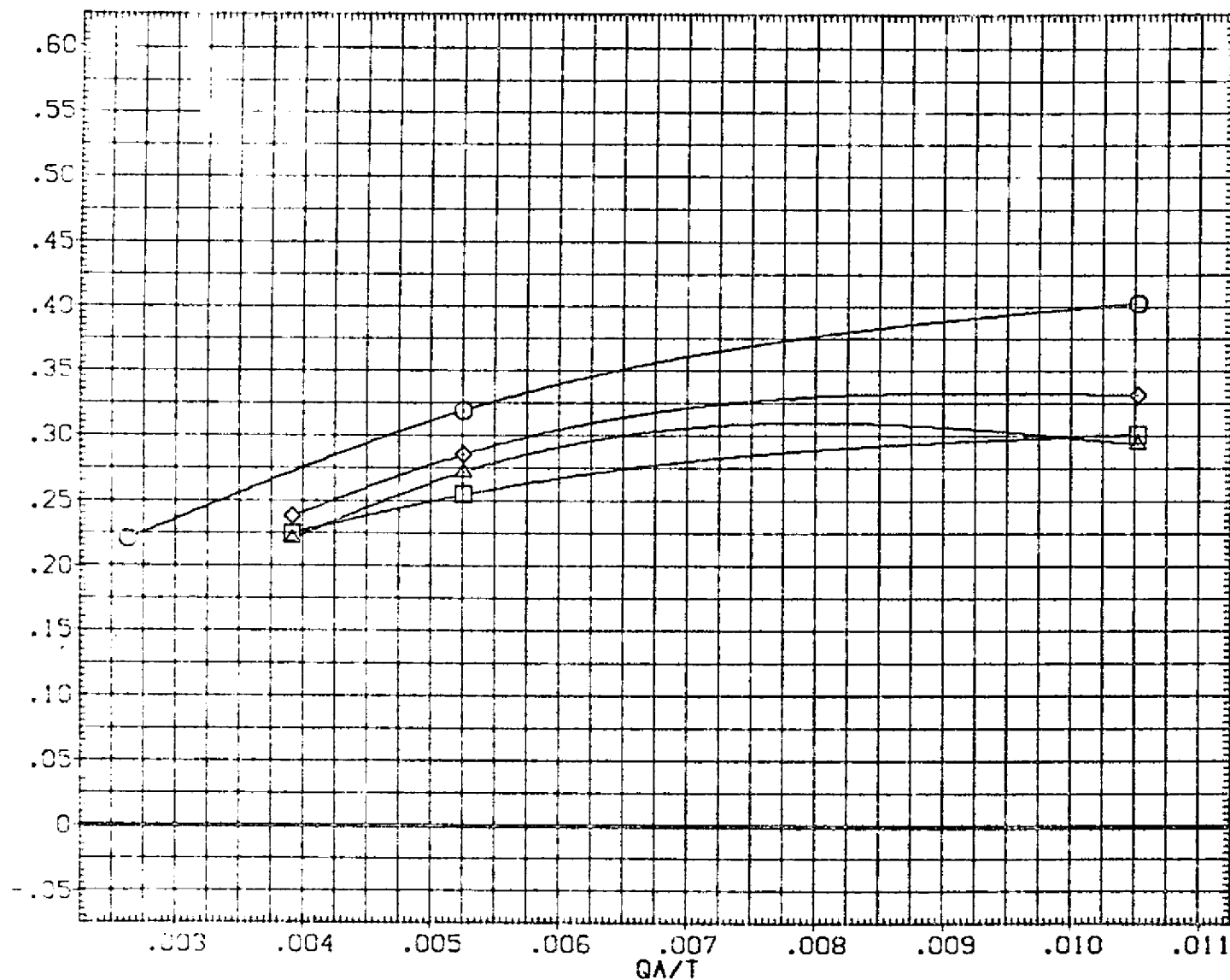


FIGURE 93. AREA RATIO EFFECTS, L/H DOWN FIRING JETS
(B) ALPHA = -6.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	NO. JET	BD FLAP	BETA	REFERENCE INFORMATION		
(SJA071)	01N31 LARC CFHT 118 (MA-22)	.000	2.000	.000	.000	SREF	2690.0000	SQ. FT.
(SJA072)	01N34 LARC CFHT 118 (MA-22)	.000	2.000	.000	.000	LREF	474.8000	INCHES
(SJA073)	01N47 LARC CFHT 118 (MA-22)	.000	2.000	.000	.000	BREF	936.6800	INCHES
(SJA074)	01N43 LARC CFHT 118 (MA-22)	.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
						YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - SIDE FORCE, N(SF)

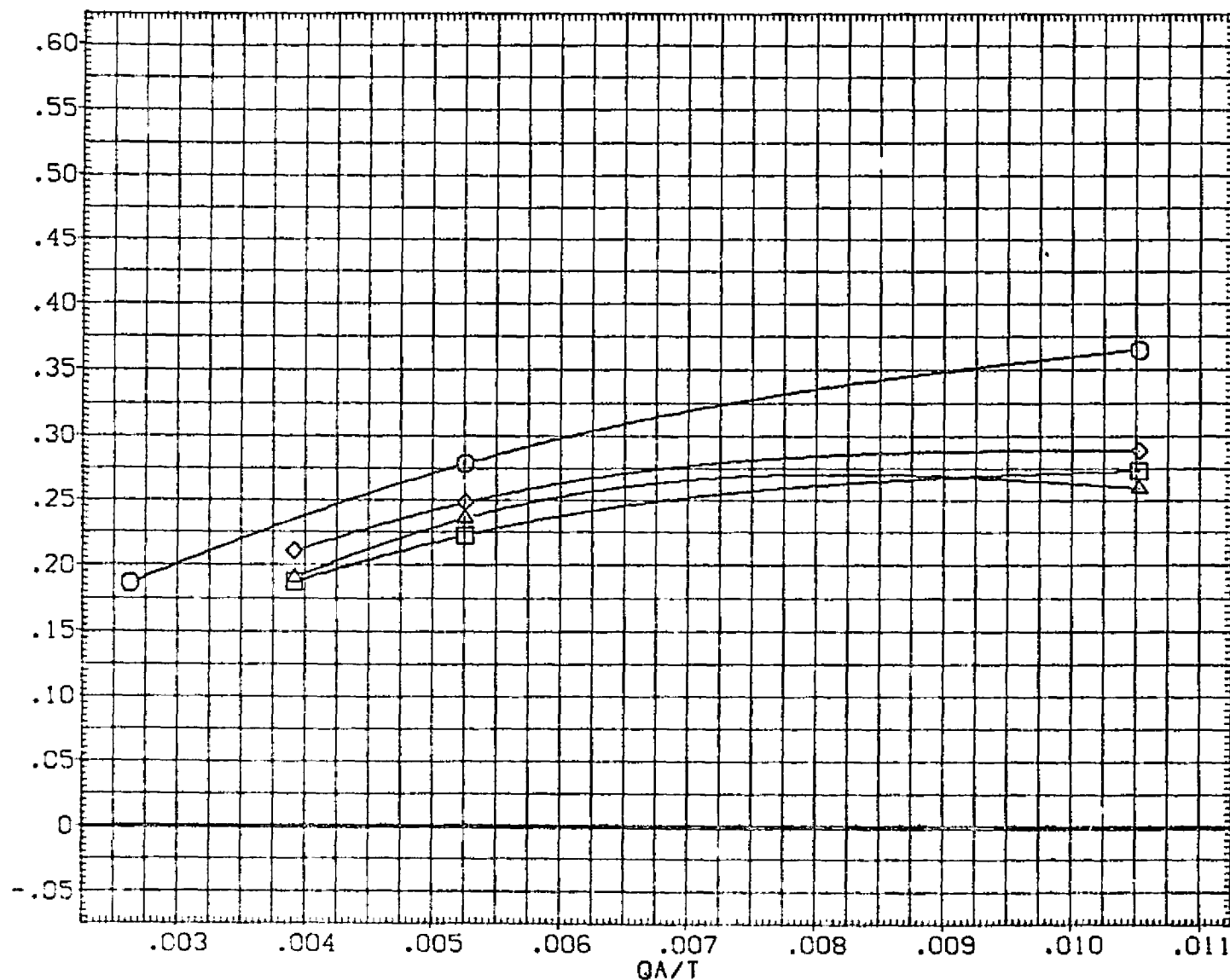


FIGURE 93. AREA RATIO EFFECTS, L/H DOWN FIRING JETS
(C) ALPHA = -4.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA071)	01N31 LARG CFHT 118 (MA-22)
(SJA072)	01N34 LARG CFHT 118 (MA-22)
(SJA073)	01N47 LARG CFHT 118 (MA-22)
(SJA074)	01N43 LARG CFHT 118 (MA-22)

ELEVON	NO. JET	BD FLAP	BETA	REFERENCE INFORMATION
.000	2.000	.000	.000	SREF 2620.0000 SQ. FT.
.000	2.000	.000	.000	LREF 474.8000 INCHES
.000	2.000	.000	.000	BREF 938.6800 INCHES
.000	2.000	.000	.000	XMPP 1076.7000 IN. X0
				YMPP .0000 IN. Y0
				ZMPP 375.0000 IN. Y0
				SCALE .0100

RCS JET AMPLIFICATION FACTOR - SIDE FORCE, N(SF)

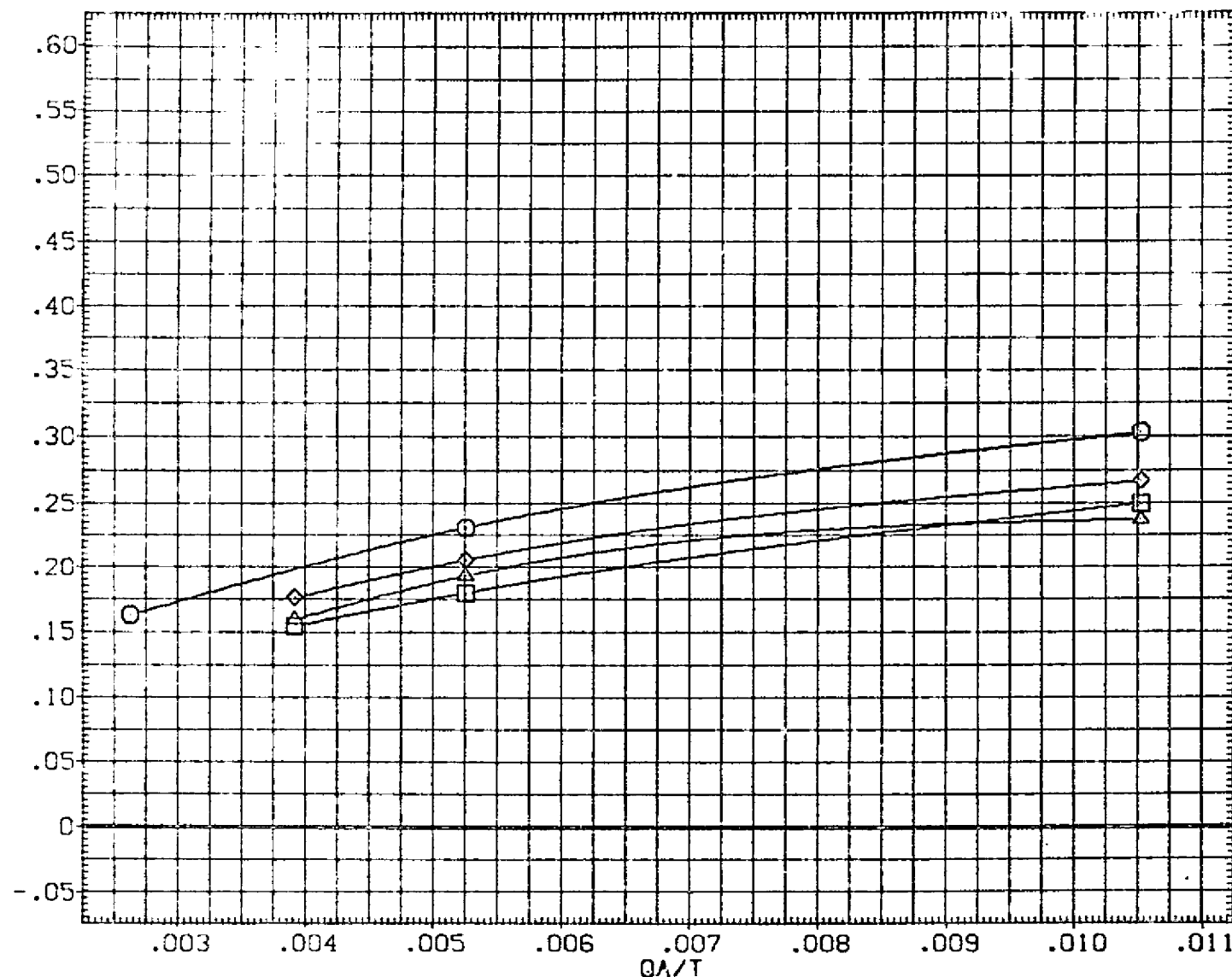


FIGURE 93. AREA RATIO EFFECTS, L/H DOWN FIRING JETS
(D) ALPHA = -2.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	NO. JET	BD FLAP	BETA	REFERENCE INFORMATION		
(SJA071)	01N31 LARC CFHT 118 (MA-22)	.000	2.000	.000	.000	SREF	2690.0000	SQ. FT.
(SJA072)	01N34 LARC CFHT 118 (MA-22)	.000	2.000	.000	.000	LREF	474.8000	INCHES
(SJA073)	01N47 LARC CFHT 118 (MA-22)	.000	2.000	.000	.000	BREF	936.6800	INCHES
(SJA074)	01N43 LARC CFHT 118 (MA-22)	.000	2.000	.000	.000	XHRP	1076.7000	IN. X0
						YMRP	.0000	IN. Y0
						ZHRP	375.0000	IN. Z0
						SCALE	.0100	

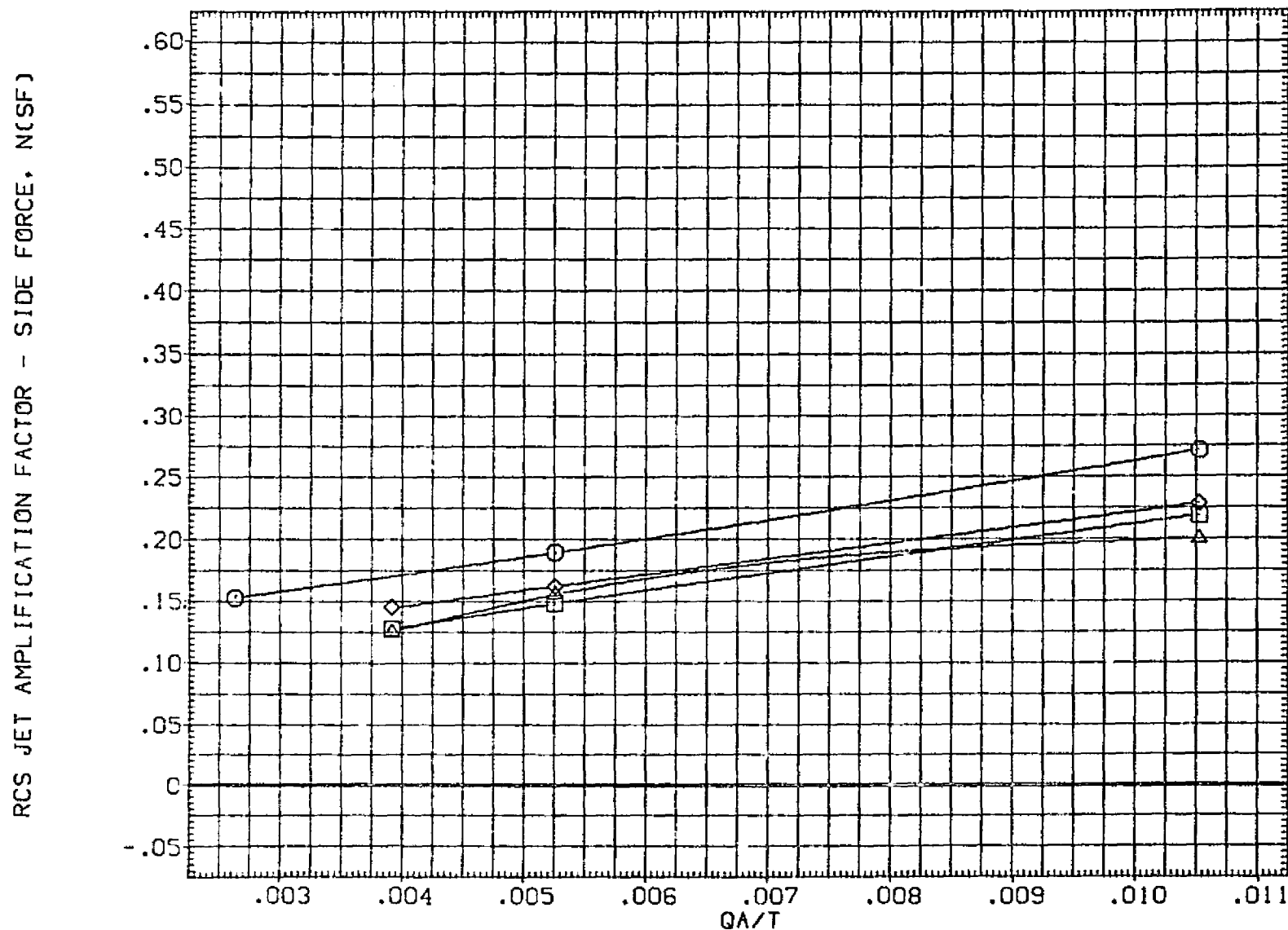


FIGURE 93. AREA RATIO EFFECTS, L/H DOWN FIRING JETS

(E) ALPHA = .00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA071)	01N31 LARC CFHT 118 (MA-22)
(SJA072)	01N34 LARC CFHT 118 (MA-22)
(SJA073)	01N47 LARC CFHT 118 (MA-22)
(SJA074)	01N43 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BD FLAP	BETA	REFERENCE INFORMATION
.000	2.000	.000	.000	SREF 2690.0000 SQ. FT.
.000	2.000	.000	.000	LREF 474.8000 INCHES
.000	2.000	.000	.000	BREF 956.6800 INCHES
.000	2.000	.000	.000	XMRP 1076.7000 IN. X0
				YMRP .0000 IN. Y0
				ZMRP 375.0000 IN. Z0
				SCALE .0100

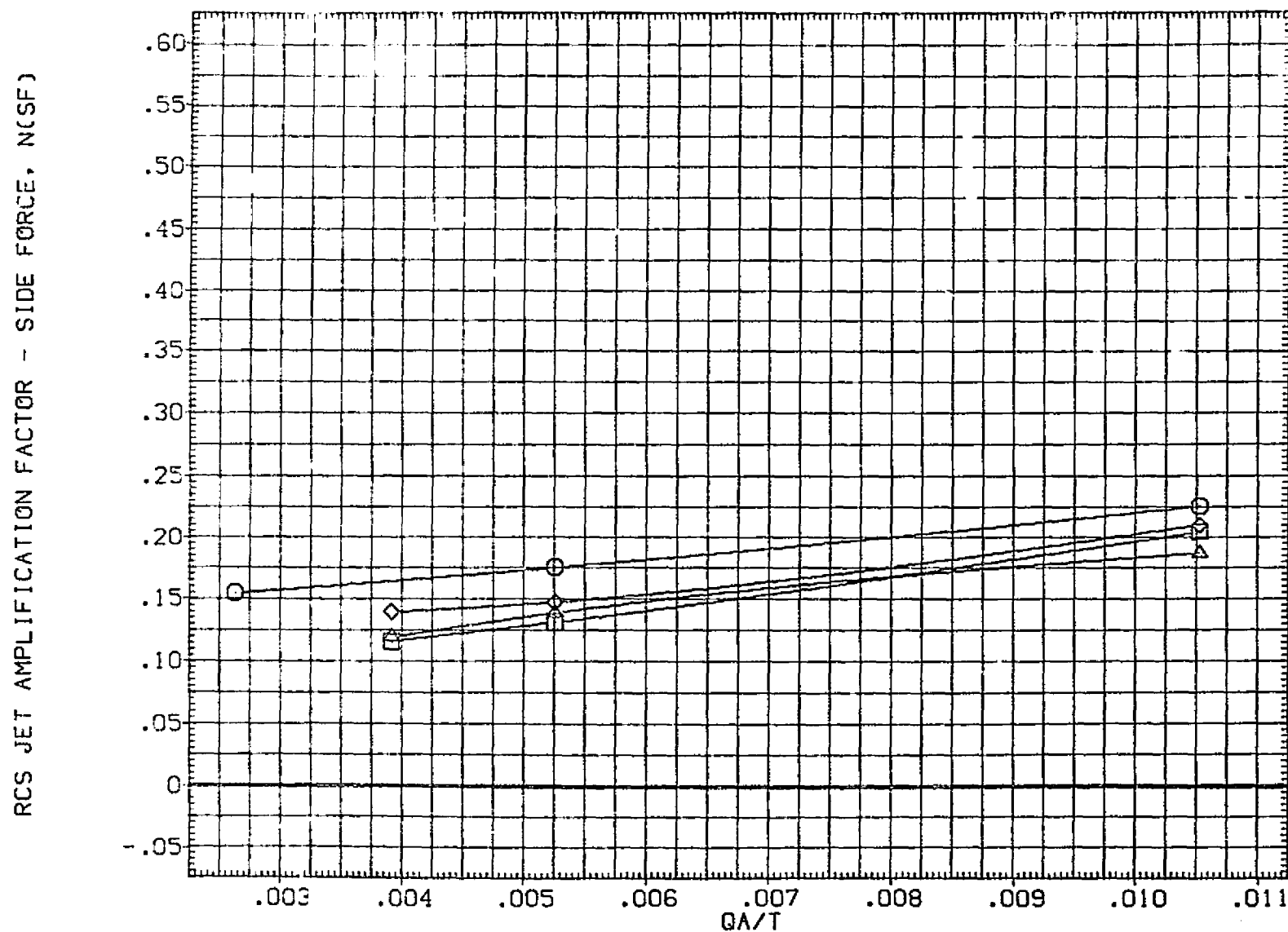


FIGURE 93. AREA RATIO EFFECTS, L/H DOWN FIRING JETS
(F) ALPHA = 2.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA071)	01N31 LARC CFHT 118 (MA-22)
(SJA072)	01N34 LARC CFHT 118 (MA-22)
(SJA073)	01N47 LARC CFHT 118 (MA-22)
(SJA074)	01N43 LARC CFHT 118 (MA-22)

ELEVON	NO.JET	BDFLAP	BETA	REFERENCE INFORMATION
.000	2.000	.000	.000	SREF 2690.0000 SQ.FT.
.000	2.000	.000	.000	LREF 474.8000 INCHES
.000	2.000	.000	.000	BREF 936.6800 INCHES
.000	2.000	.000	.000	XMRF 1076.7000 IN. X0
.000	2.000	.000	.000	YMRF .0000 IN. Y0
.000	2.000	.000	.000	ZMRF 375.0000 IN. Z0
				SCALE .0100

RCS JET AMPLIFICATION FACTOR - SIDE FORCE, N(SF)

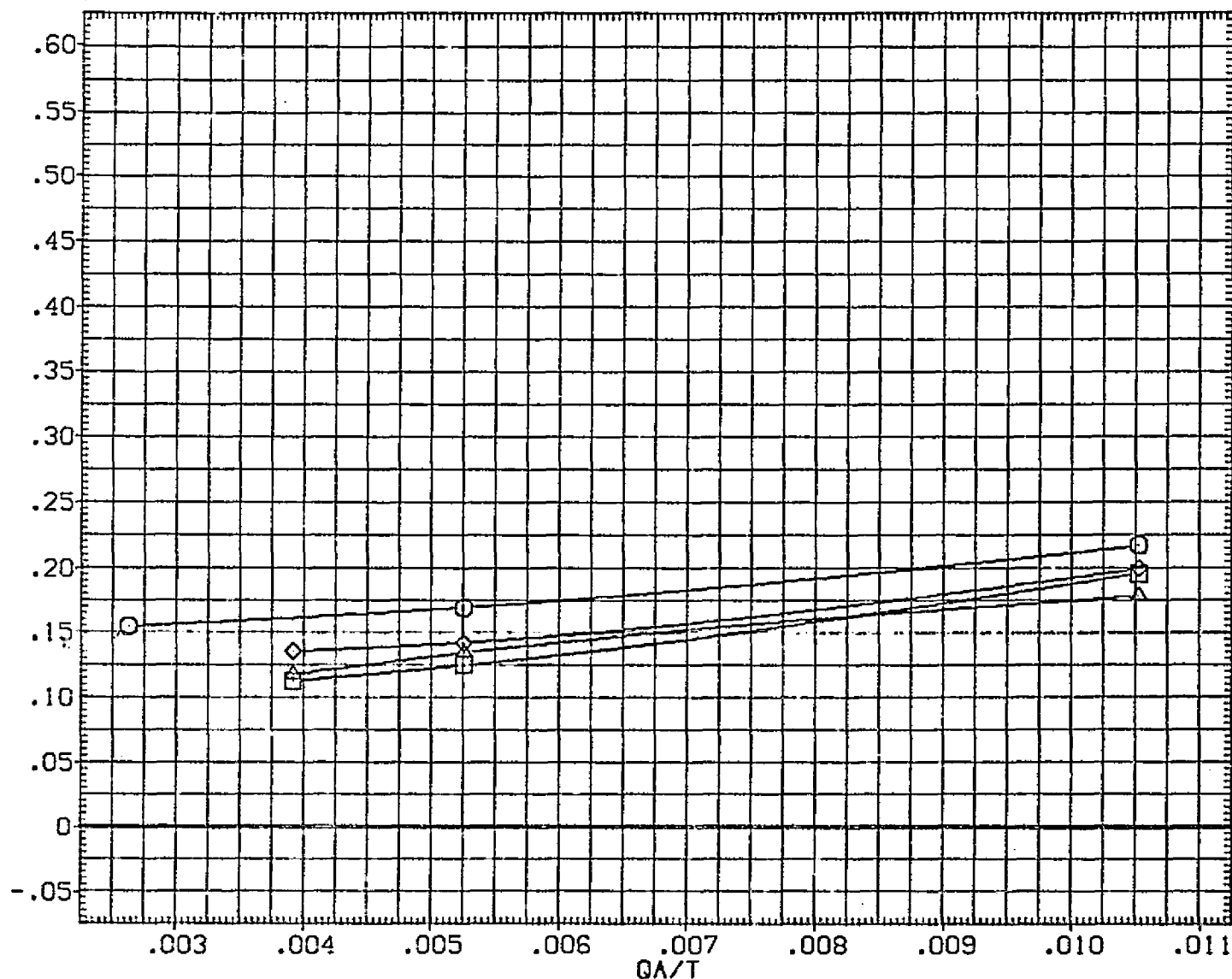


FIGURE 93. AREA RATIO EFFECTS, L/H DOWN FIRING JETS
(G) ALPHA = 4.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA071)	01N31 LARC CFHT 118 (MA-22)
(SJA072)	01N34 LARC CFHT 118 (MA-22)
(SJA073)	01N47 LARC CFHT 118 (MA-22)
(SJA074)	01N43 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BDFLAP	BETA	REFERENCE INFORMATION
.000	2.000	.000	.000	SREF 25.0.0000 SC.FT.
.000	2.000	.000	.000	LREF 174.8000 INCHES
.000	2.000	.000	.000	BREF 35.6800 INCHES
.000	2.000	.000	.000	XMRP 1076.7000 IN. X0
.000	2.000	.000	.000	YMRP .0000 IN. Y0
.000	2.000	.000	.000	ZMRP 375.0000 IN. Z0
.000	2.000	.000	.000	SCALE .0100

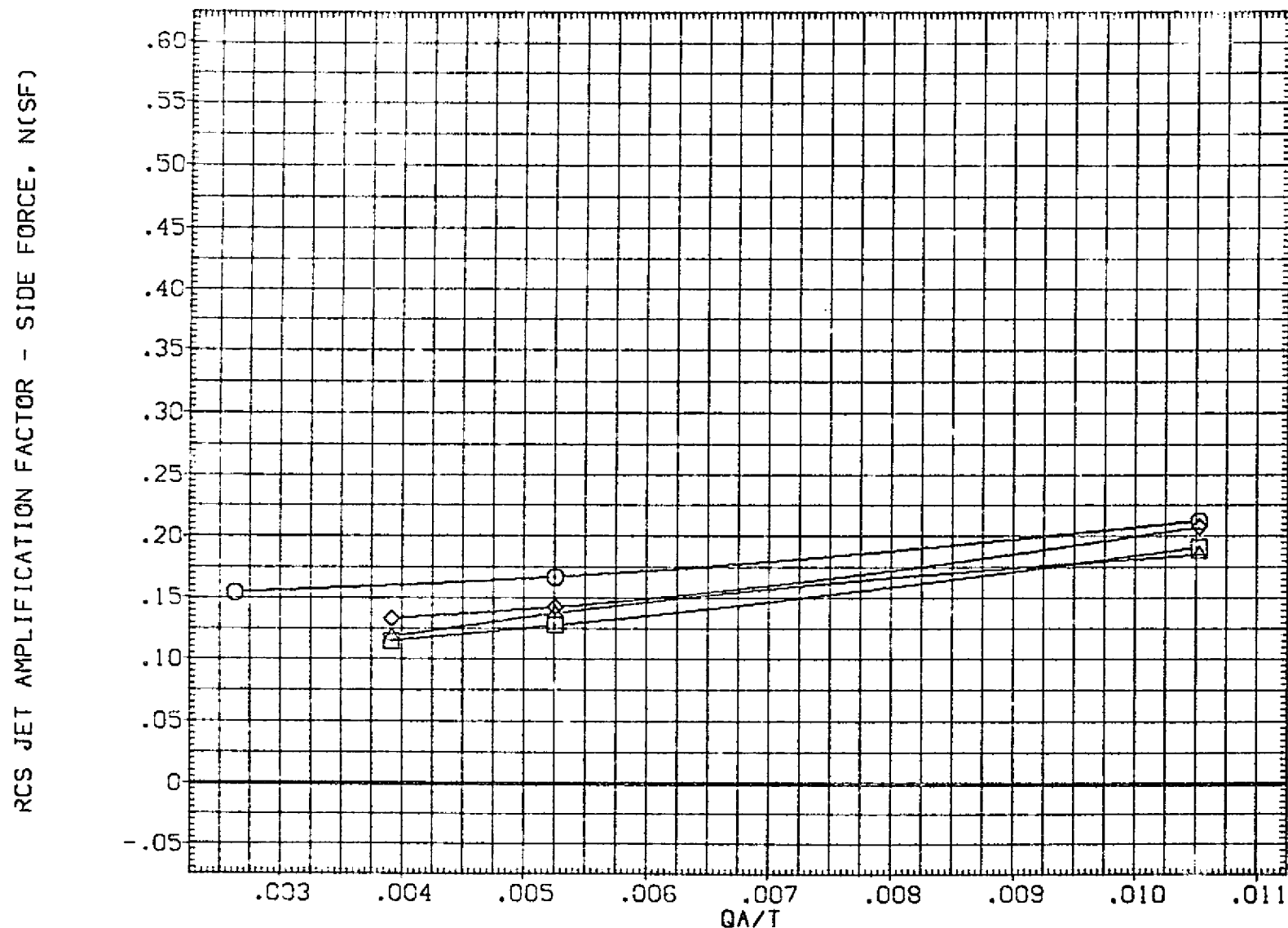


FIGURE 93. AREA RATIO EFFECTS, L/H DOWN FIRING JETS

(H)ALPHA = 6.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA071)	01N31 LARC CFHT 118 (MA-22)
(SJA072)	01N34 LARC CFHT 118 (MA-22)
(SJA073)	01N47 LARC CFHT 118 (MA-22)
(SJA074)	01N43 LARC CFHT 118 (MA-22)

ELEVON	NO.JET	BOFLAP	BETA	REFERENCE INFORMATION		
.000	2.000	.000	.000	SREF	2690.0000	50. FT.
.000	2.000	.000	.000	LREF	474.8000	INCHES
.000	2.000	.000	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - SIDE FORCE, N(SF)

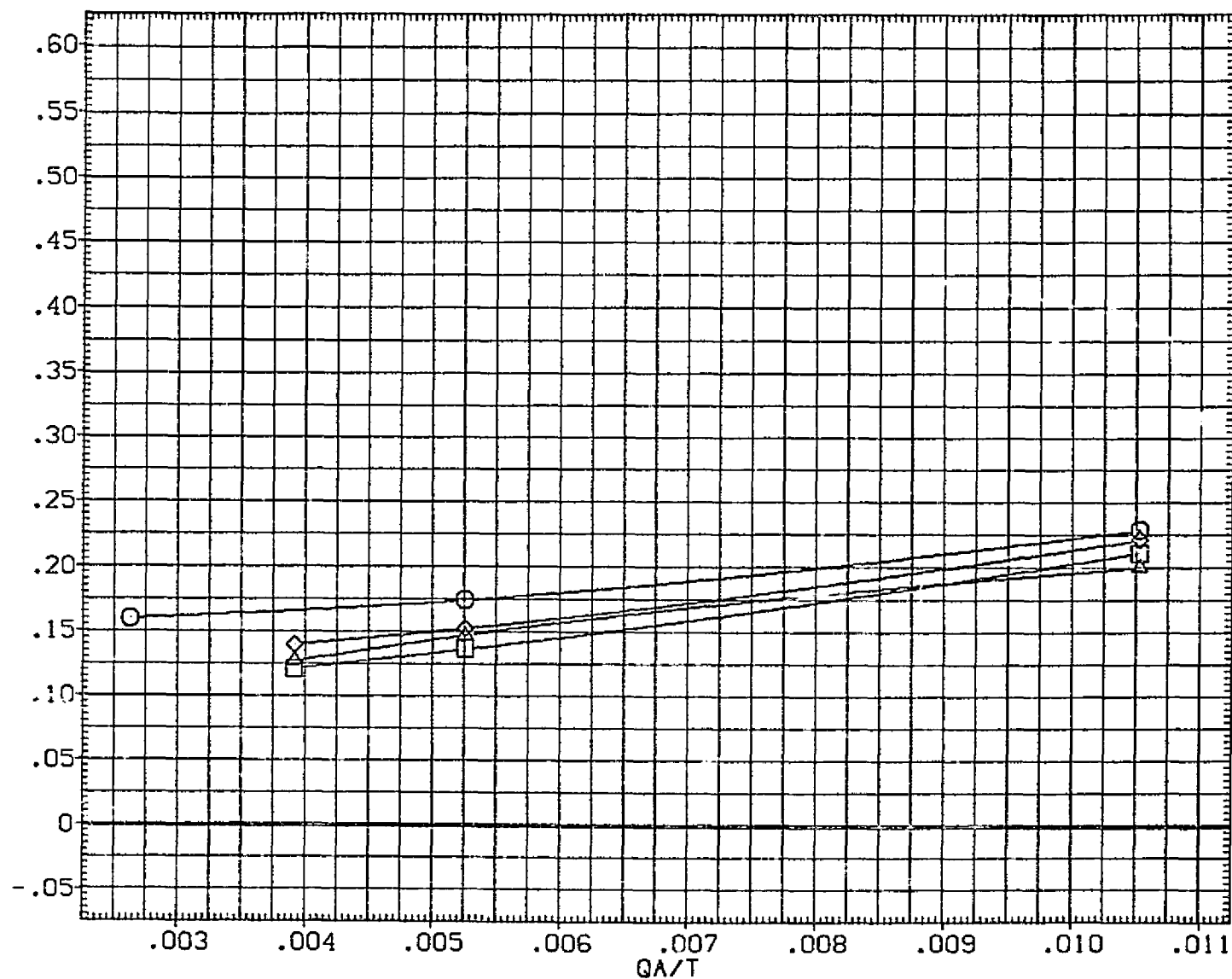


FIGURE 93. AREA RATIO EFFECTS, L/H DOWN FIRING JETS

(I) ALPHA = 8.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA071) □	01N31 LARC CFHT 118 (MA-22)
(SJA072) □	01N34 LARC CFHT 118 (MA-22)
(SJA073) ◇	01N47 LARC CFHT 118 (MA-22)
(SJA074) △	01N43 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BD FLAP	BETA	REFERENCE INFORMATION		
.000	2.000	.000	.000	SREF	2690.000%	50. FT.
.000	2.000	.000	.000	LREF	474.80%	INCHES
.000	2.000	.000	.000	BREF	936.6%	INCHES
.000	2.000	.000	.000	XMRP	1076.7300	IN. X0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - SIDE FORCE, N(SF)

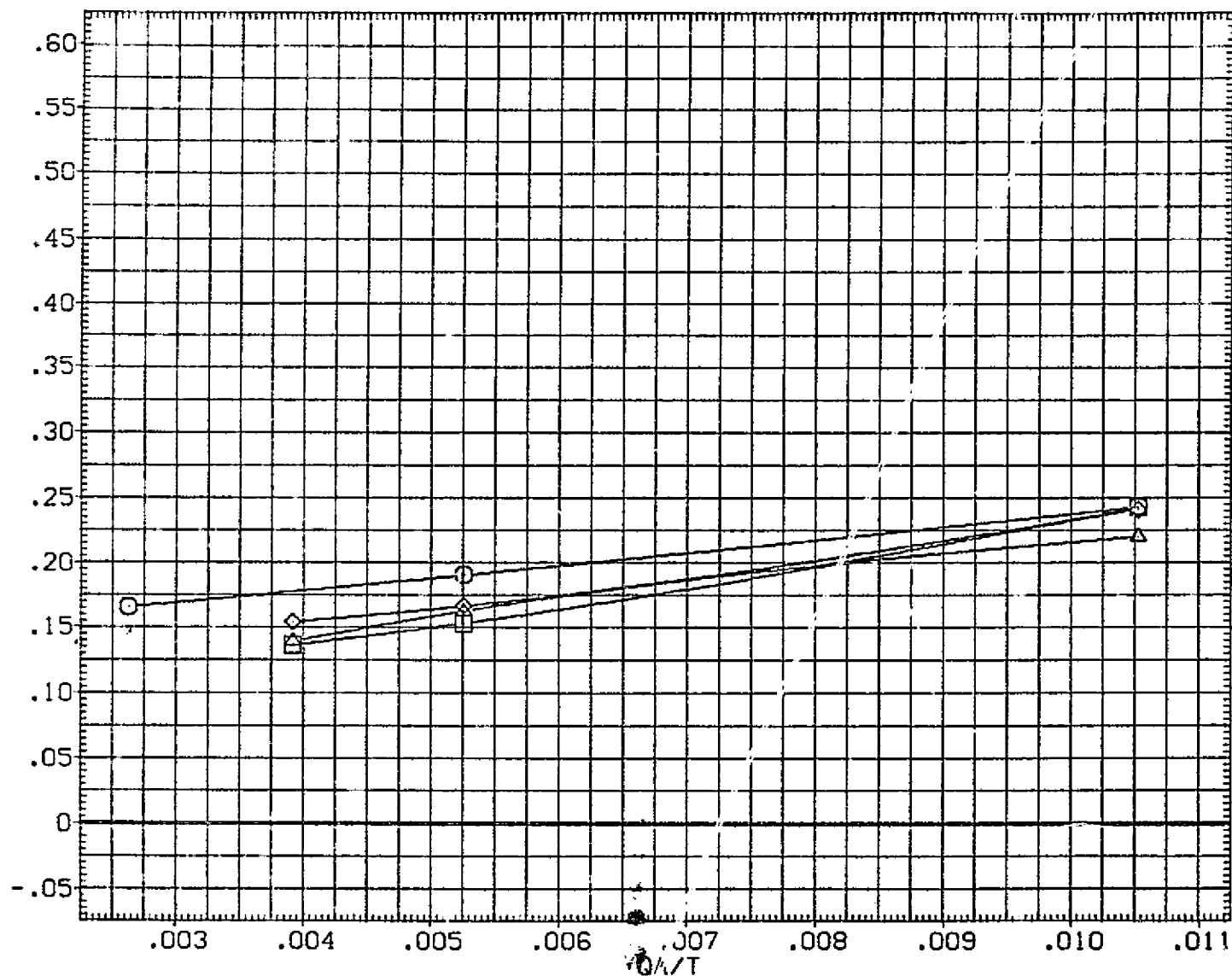


FIGURE 93. AREA RATIO EFFECTS, L/H DOWN FIRING JETS
(J)ALPHA = 10.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA071) ○	01N31 LARC CFHT 118 (MA-22)
(SJA072) □	01N34 LARC CFHT 118 (MA-22)
(SJA073) ◇	01N47 LARC CFHT 118 (MA-27)
(SJA074) △	01N43 LARC CFHT 118 (MA-27)

ELEVON	NO. JET	BD FLAP	BETA	REFERENCE INFORMATION
.000	2.000	.000	.000	SREF 2690.0000 SQ. FT.
.000	2.000	.000	.000	LREF 474.8000 INCHES
.000	2.000	.000	.000	BREF 936.6800 INCHES
.000	2.000	.000	.000	XMRP 1076.7000 IN. X0
				YMRP .0000 IN. Y0
				ZMRP 375.0000 IN. Z0
				SCALE .0100

RCS JET AMPLIFICATION FACTOR - SIDE FORCE, N(SF)

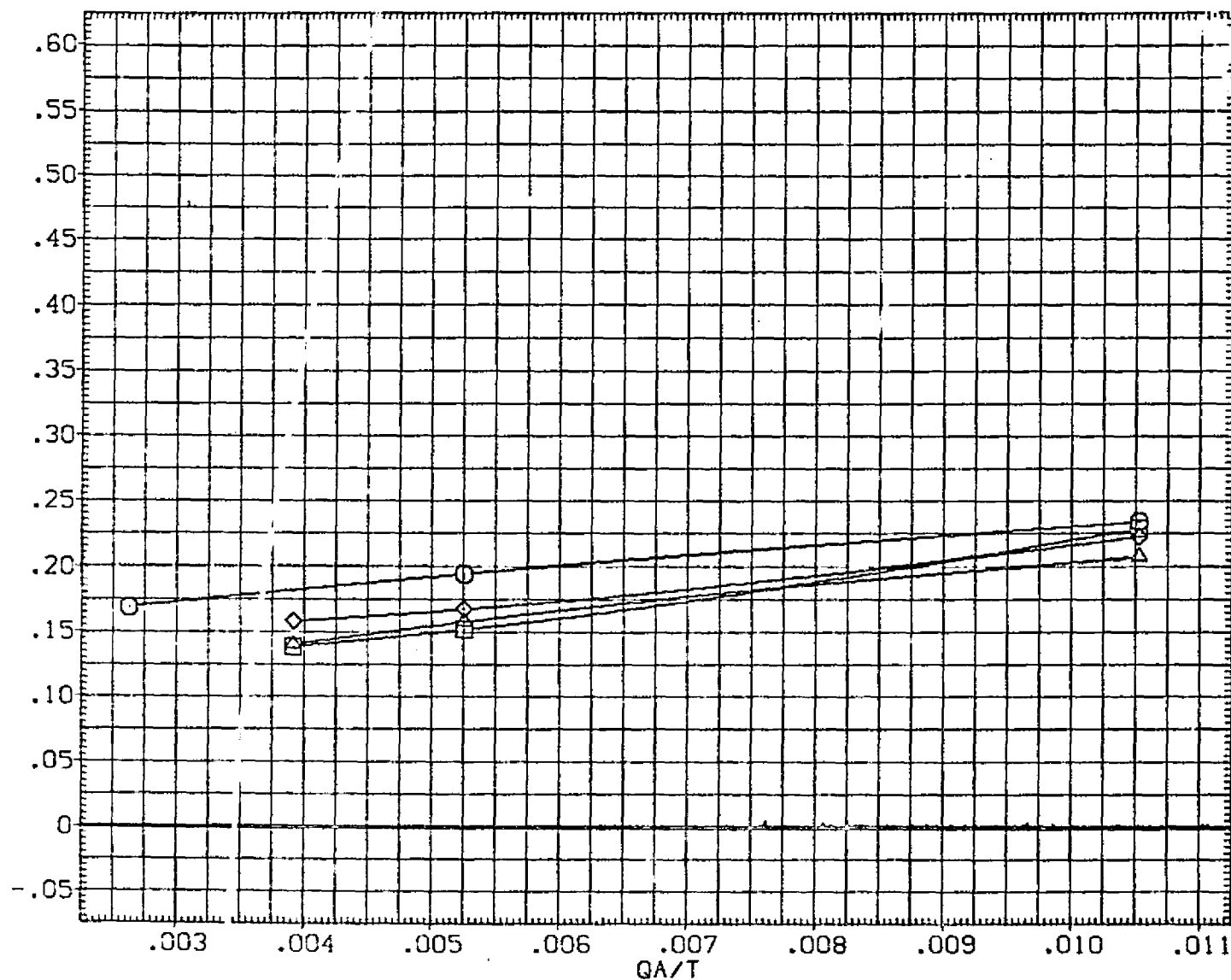


FIGURE 93. AREA RATIO EFFECTS, L/H DOWN FIRING JETS

(K)ALPHA = 15.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA071)	01N31 LARC CFHT 118 (MA-22)
(SJA072)	01N34 LARC CFHT 118 (MA-22)
(SJA073)	01N47 LARC CFHT 118 (MA-22)
(SJA074)	01N43 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BD FLAP	BETA	REFERENCE INFORMATION		
.000	2.000	.000	.000	SREF	2690.0000	SQ. FT.
.000	2.000	.000	.000	LREF	474.8000	INCHES
.000	2.000	.000	.000	BREF	938.6800	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.0100	

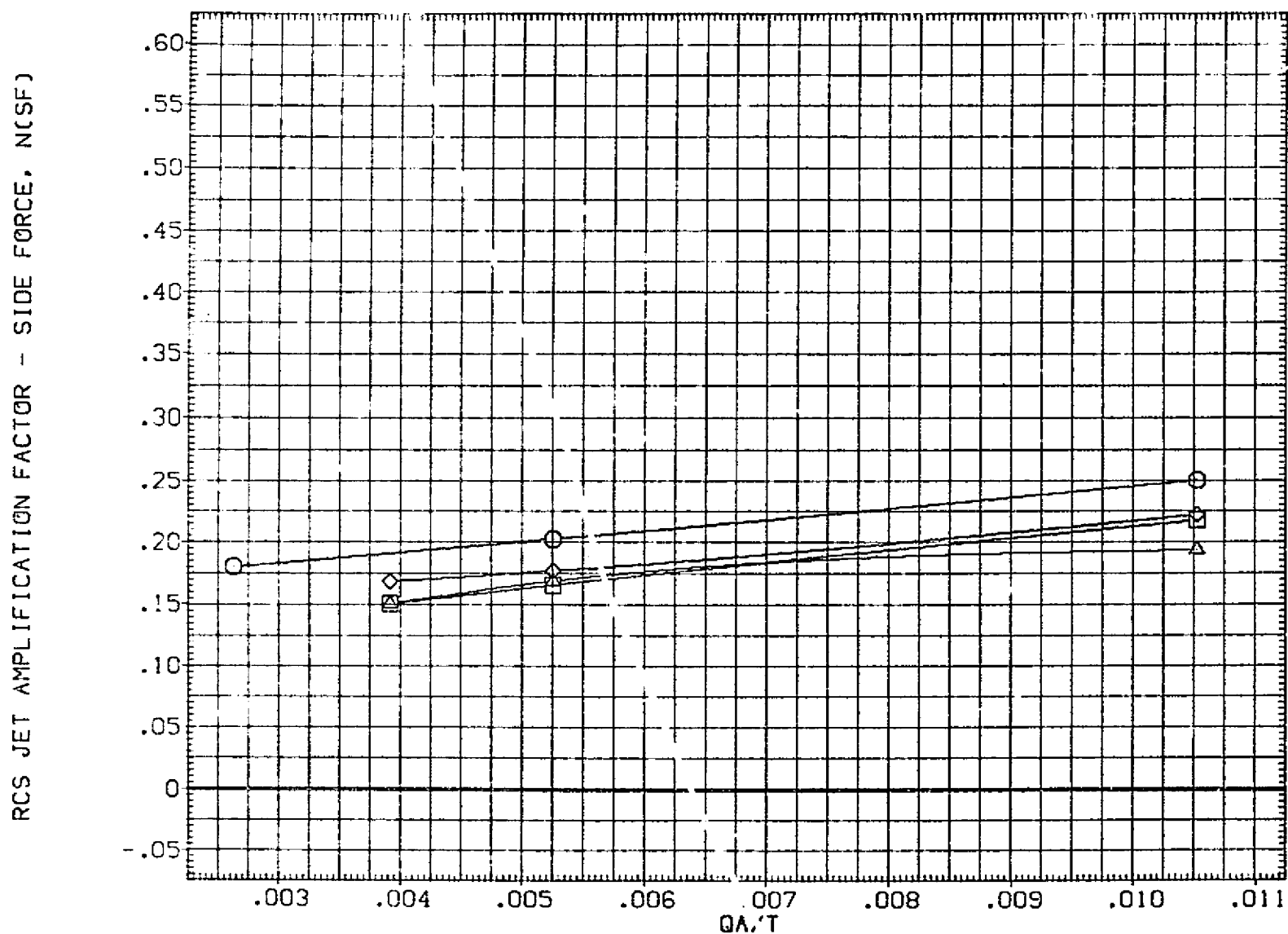


FIGURE 93. AREA RATIO EFFECTS, L/H DOWN FIRING JETS

(L) ALPHA = 20.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA071) ○	01N31 LARC CFHT 118 (MA-22)
(SJA072) □	01N34 LARC CFHT 118 (MA-22)
(SJA073) ◇	01N47 LARC CFHT 118 (MA-22)
(SJA074) △	01N43 LARC CFHT 118 (MA-22)

ELEVON	NO.JET	BDFLAP	BETA	REFERENCE INFORMATION
.000	2.000	.000	.000	SPEF 2690.0000 SQ.FT.
.000	2.000	.000	.000	LR.F 474.8000 INCHES
.000	2.000	.000	.000	BRE." 936.6800 INCHES
.000	2.000	.000	.000	XMRP 1076.7000 IN. X0
				YMRP .0000 IN. Y0
				ZMRP 375.0000 IN. Z0
				SCALE .0100

RCS JET AMPLIFICATION FACTOR - SIDE FORCE, NCSF)

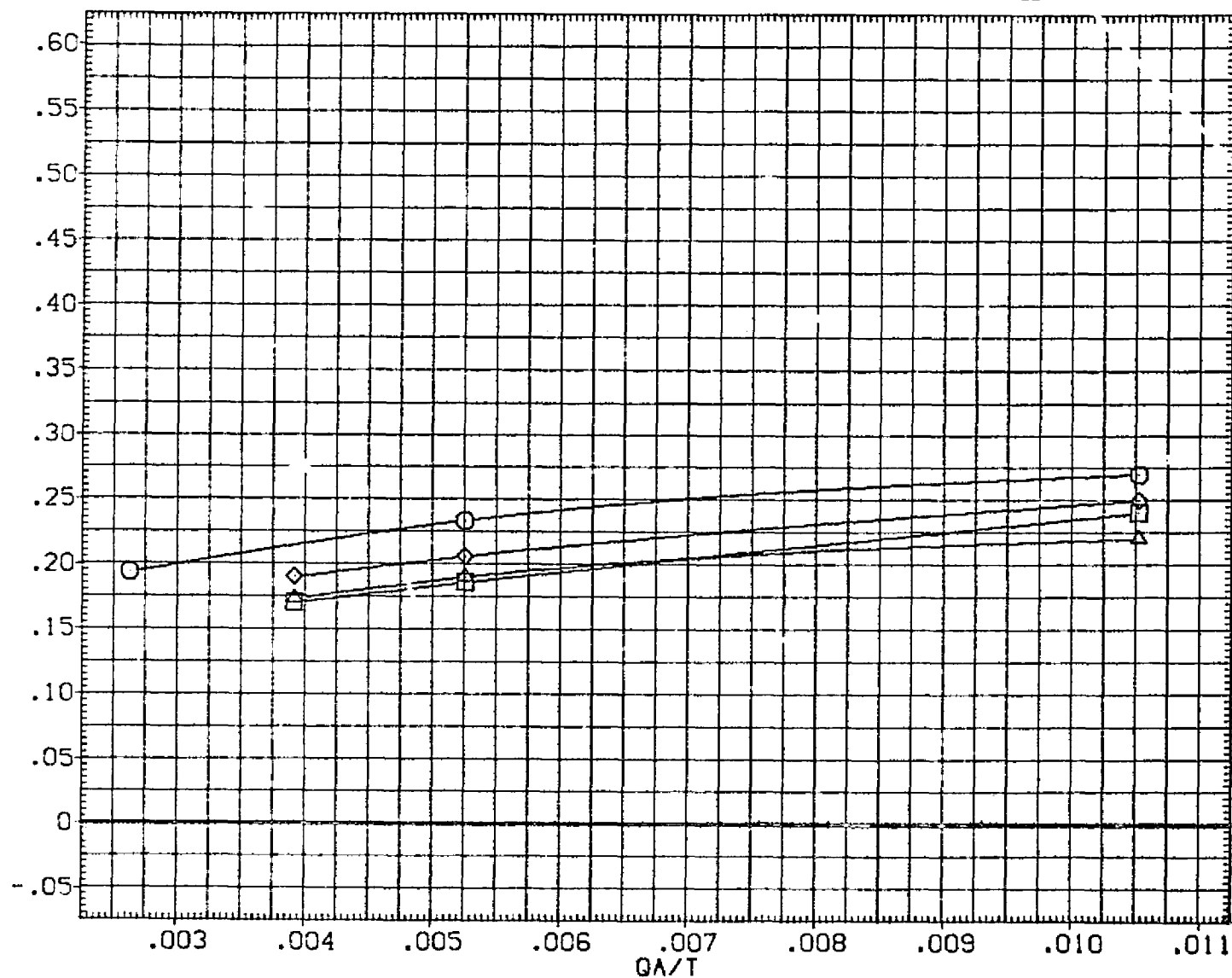


FIGURE 93. AREA RATIO EFFECTS, L/H DOWN FIRING JETS
(M)ALPHA = 25.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA071)	01N31 LARC CFHT 118 (MA-22)
(SJA072)	01N34 LARC CFHT 118 (MA-22)
(SJA073)	01N47 LARC CFHT 118 (MA-22)
(SJA074)	01N43 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BOFLAP	BETA	REFERENCE INFORMATION		
.000	2.000	.000	.000	SREF	2690.0000	50. FT.
.000	2.000	.000	.000	LREF	474.8000	INCHES
.000	2.000	.000	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XM-P	1076.7000	IN. X0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Y0
				SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - SIDE FORCE, N(SF)

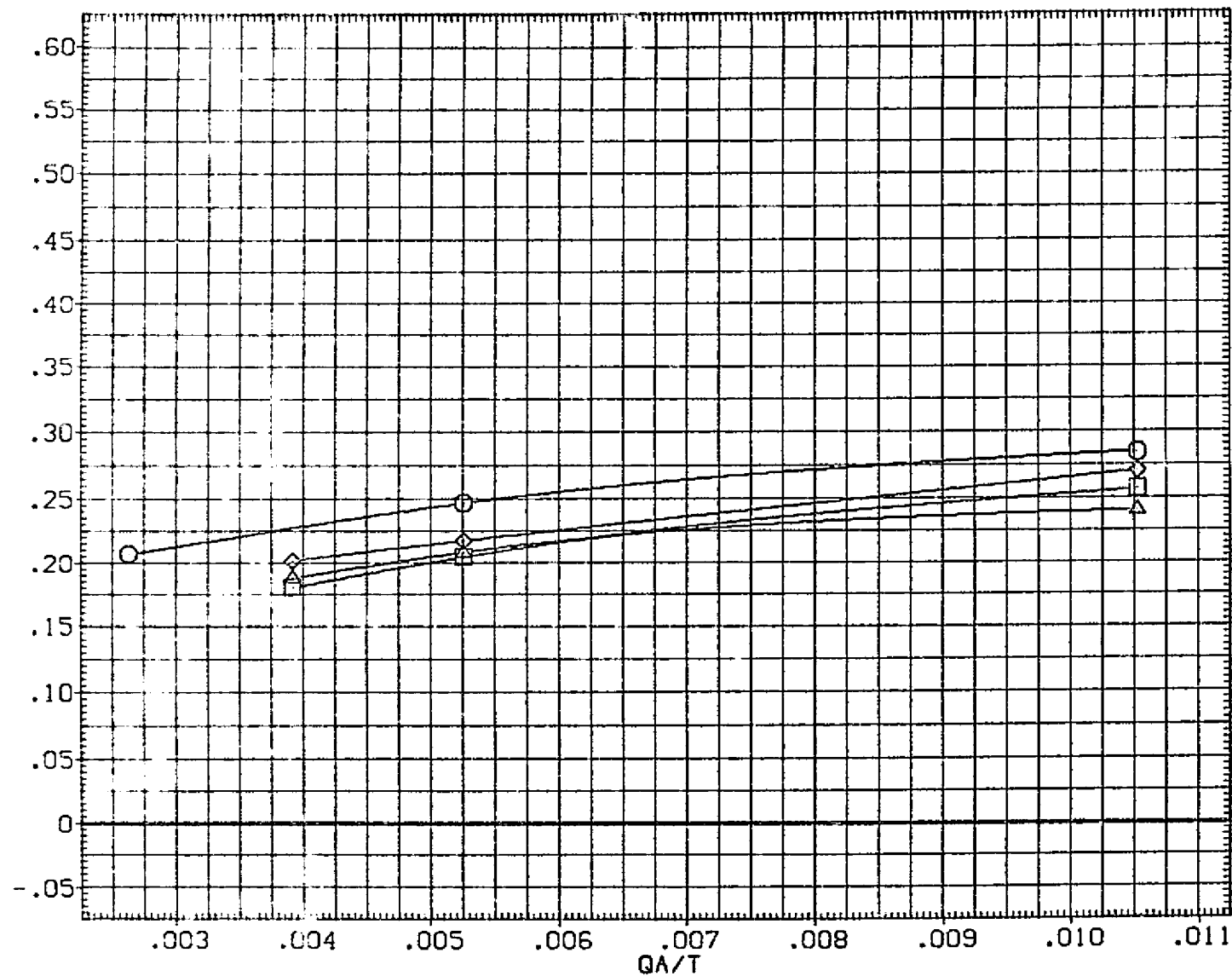


FIGURE 93. AREA RATIO EFFECTS, L/H DOWN FIRING JETS
(N)ALPHA = 30.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA075)	01N32 LARC CFHT 118 (MA-22)
(SJA076)	01N36 LARC CFHT 118 (MA-22)
(SJA077)	01N48 LARC CFHT 118 (MA-22)
(SJA078)	01N44 LARC CFHT 118 (MA-22)

ELEVON	NO.JET	BOFLAP	BETA	REFERENCE INFORMATION		
.000	2.000	.000	.000	SREF	2690.0000	SQ.FT.
.000	2.000	.000	.000	LREF	474.8000	INCHES
.000	2.000	.000	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. XO
				YMRP	.0000	IN. YO
				ZMRP	375.0000	IN. ZO
				SCALE	.0100	

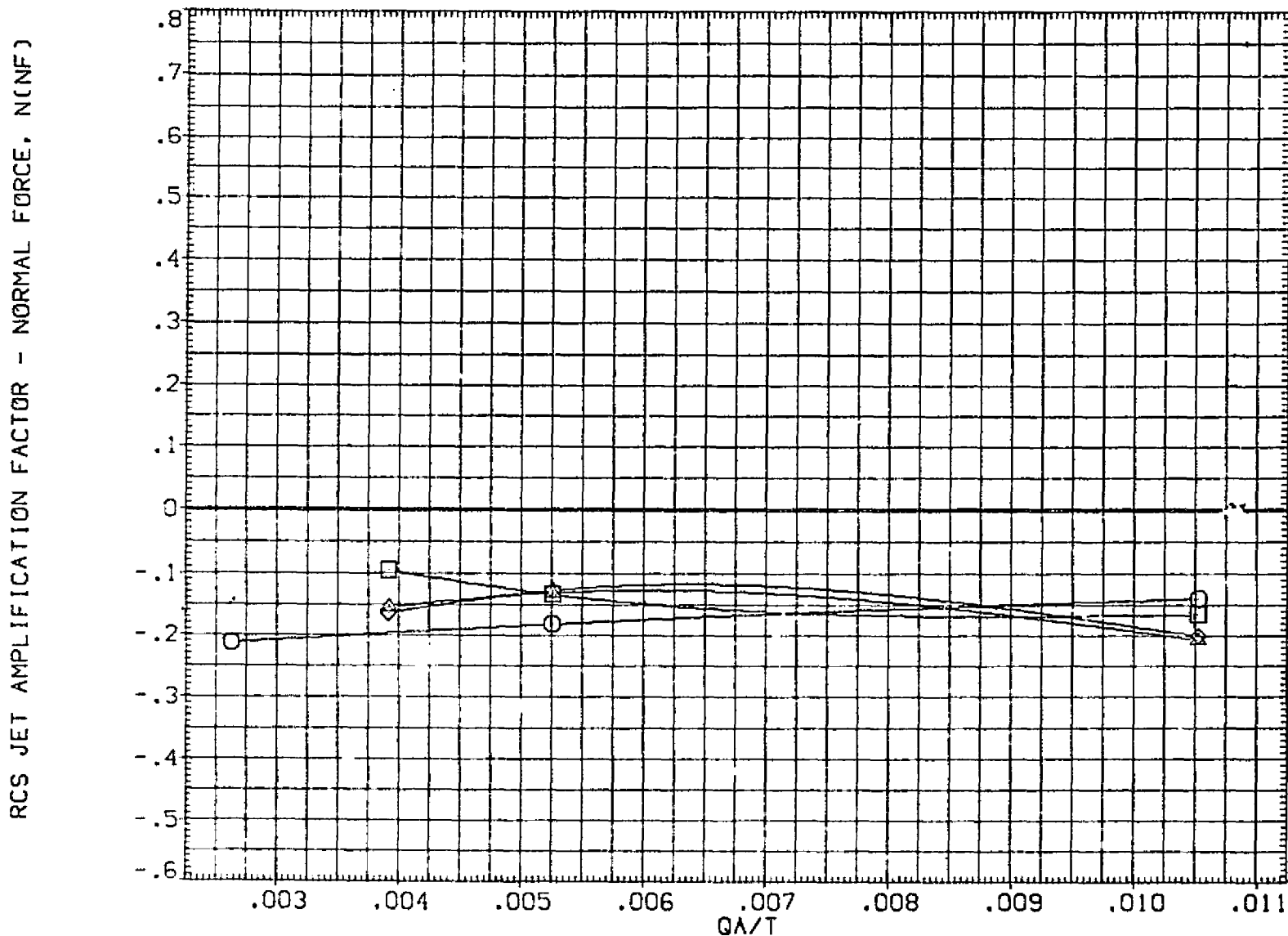


FIGURE 94. AREA RATIO EFFECTS, R/H UP FIRING JETS

(A) ALPHA = -8.00

DATA SET	SYMBOL	CONFIGURATION	DESCRIPTION
(SJA075)	○	01N32	LARC CFHT 118 (MA-22)
(SJA076)	□	01N36	LARC CFHT 118 (MA-22)
(SJA077)	◇	01N48	LARC CFHT 118 (MA-22)
(SJA078)	△	01N44	LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BD FLAP	BETA	REFERENCE INFORMATION		
.000	2.000	.000	.000	SREF	2690.0000	50. FT.
.000	2.000	.000	.000	LREF	474.8000	INCHES
.000	2.000	.000	.000	BREF	936.6000	INCHES
.000	2.000	.000	.000	XM RP	1076.7000	IN. X0
				YM RP	.0000	IN. Y0
				ZM RP	375.0000	IN. Z0
				SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - NORMAL FORCE, N(NF)

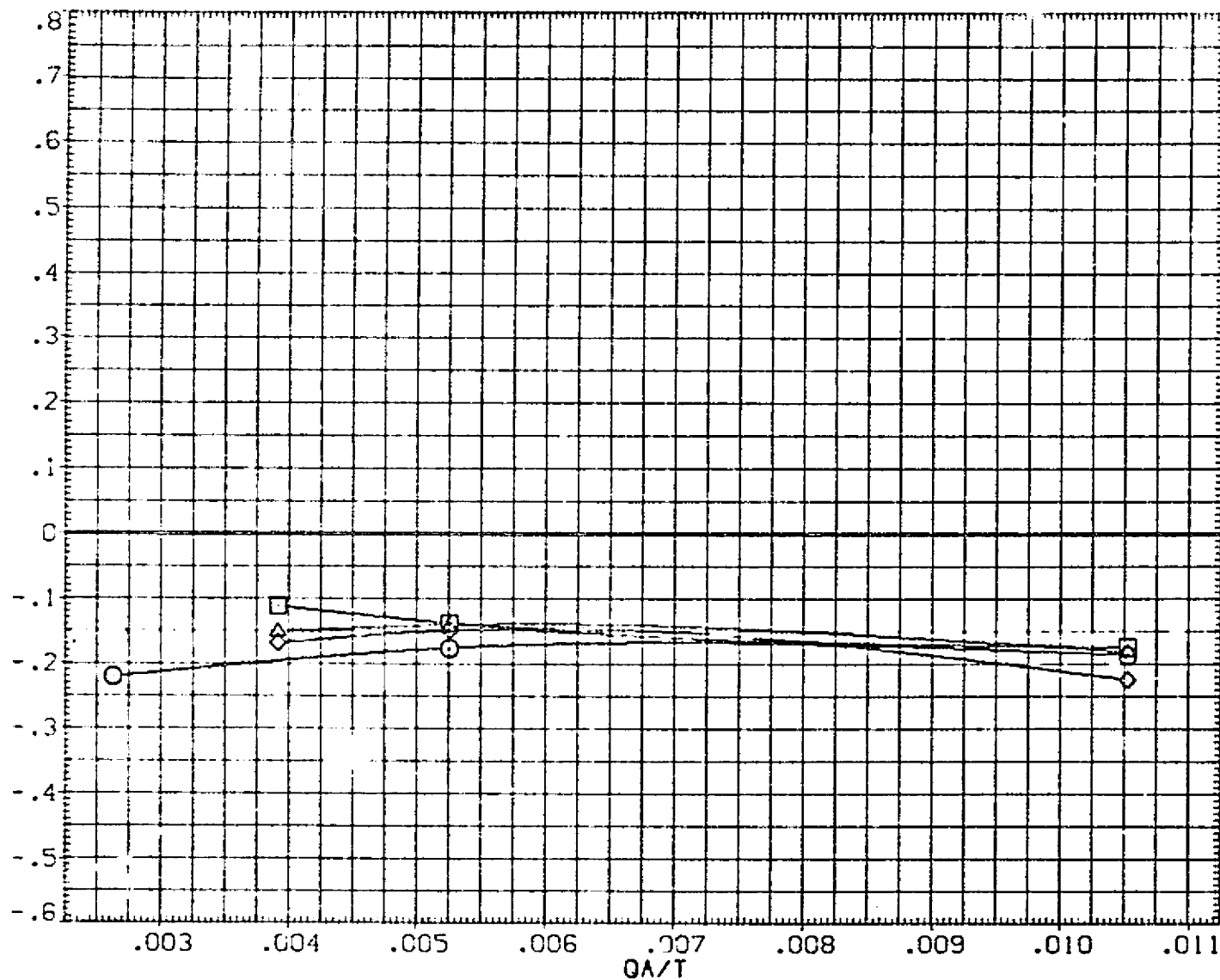


FIGURE 94. AREA RATIO EFFECTS, R/H UP FIRING JETS

(B) ALPHA = -6.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA075) ○	01N32 LARC CFHT 118 (MA-22)
(SJA076) □	01N36 LARC CFHT 118 (MA-22)
(SJA077) △	01N48 LARC CFHT 118 (MA-22)
(SJA078) ◇	01N44 LARC CFHT 118 (MA-22)

ELEVON	NO.JET	BDFLAP	BETA	REFERENCE INFORMATION		
.000	2.000	.000	.000	SREF	2690.0000	50.FT.
.000	2.000	.000	.000	LREF	474.8000	INCHES
.000	2.000	.000	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - NORMAL FORCE, N(NF)

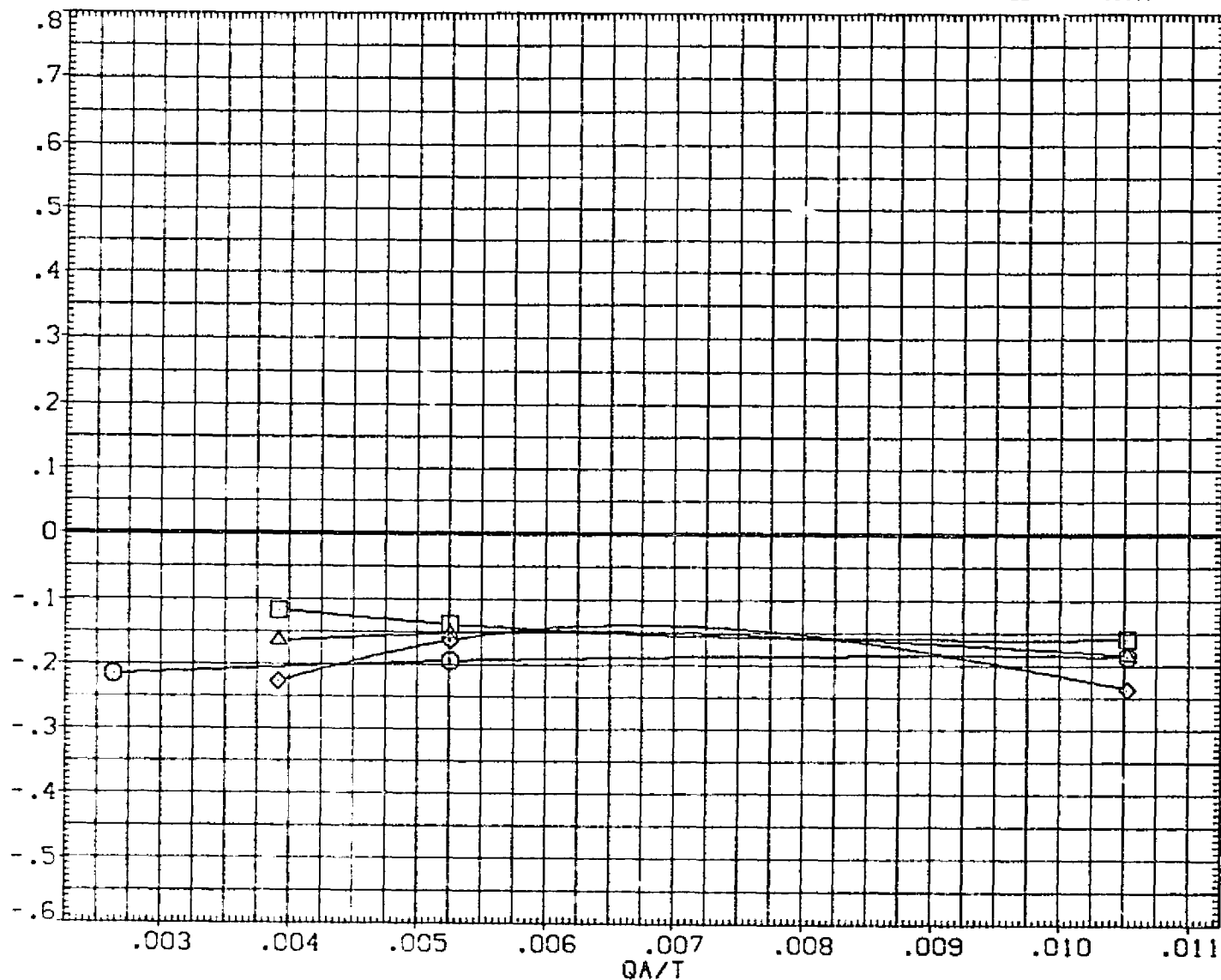


FIGURE 94. AREA RATIO EFFECTS, R/H UP FIRING JETS

((C))ALPHA = -4.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA075)	01N32 LARC CFHT 118 (MA-22)
(SJA076)	01N36 LARC CFHT 118 (MA-22)
(SJA077)	01N48 LARC CFHT 118 (MA-22)
(SJA078)	01N44 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BDFLAP	BETA	REFERENCE INFORMATION		
.000	2.000	.000	.000	SREF	2690.0000	SQ. FT.
.000	2.000	.000	.000	LREF	474.8000	INCHES
.000	2.000	.000	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - NORMAL FORCE, N(NF)

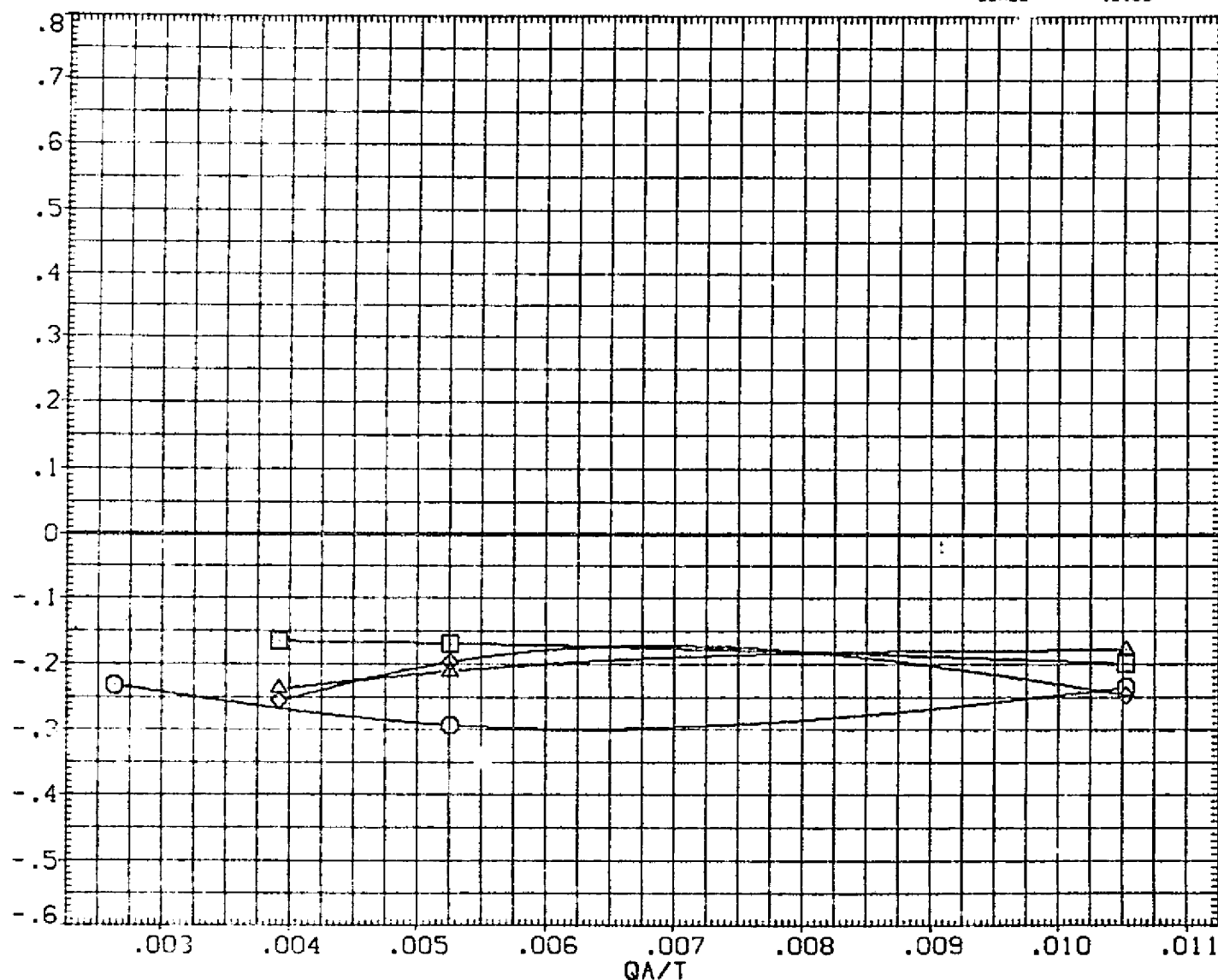


FIGURE 94. AREA RATIO EFFECTS, R/H UP FIRING JETS
(D) ALPHA = -2.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA075)	01N32 LARC CFHT 118 (MA-22)
(SJA076)	01N36 LARC CFHT 118 (MA-22)
(SJA077)	01N48 LARC CFHT 118 (MA-22)
(SJA078)	01N44 LARC CFHT 118 (MA-22)

ELEVON	NO.JET	BDFLAP	BETA	REFERENCE INFORMATION
.000	2.000	.000	.000	SREF 2690.0000 SQ.FT.
.000	2.000	.000	.000	LREF 474.8000 INCHES
.000	2.000	.000	.000	BREF 936.6800 INCHES
.000	2.000	.000	.000	XMRP 1076.7000 IN. X0
				YMRP .0000 IN. Y0
				ZMRP 375.0000 IN. Z0
				SCALE .0100

RCS JET AMPLIFICATION FACTOR - NORMAL FORCE, N(NF)

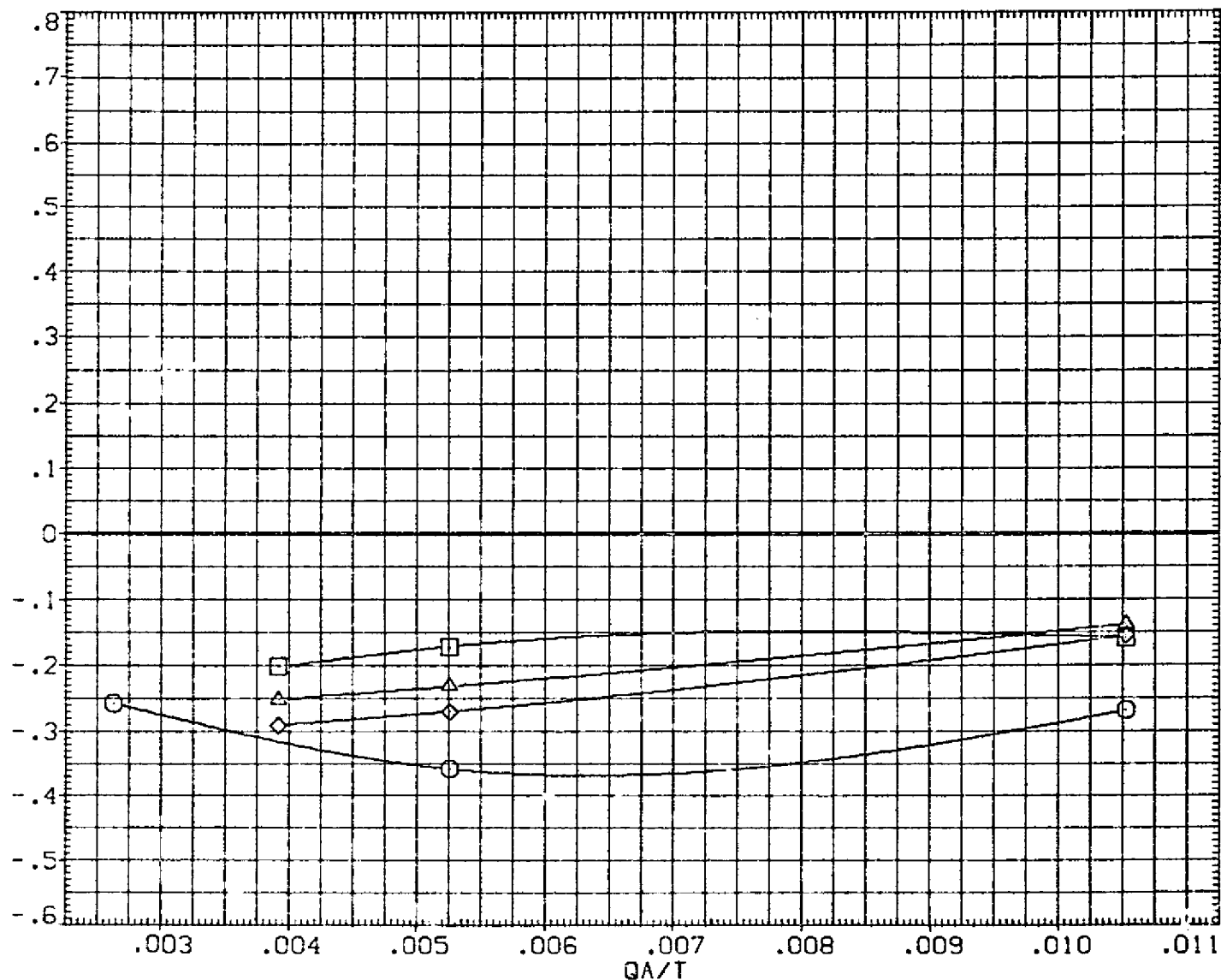


FIGURE 94. AREA RATIO EFFECTS, R/H UP FIRING JETS
(E) ALPHA = .00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA075) ○	01N32 LARC CFHT 118 (MA-22)
(SJA076) △	01N36 LARC CFHT 118 (MA-22)
(SJA077) ◇	01N48 LARC CFHT 118 (MA-22)
(SJA078) △	01N44 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	GD FLAP	BETA	REFERENCE INFORMATION		
.000	2.000	.000	.000	SREF	2690.0000	50. FT.
.000	2.000	.000	.000	LREF	474.8000	INCHES
.000	2.000	.000	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - NORMAL FORCE, N(NF)

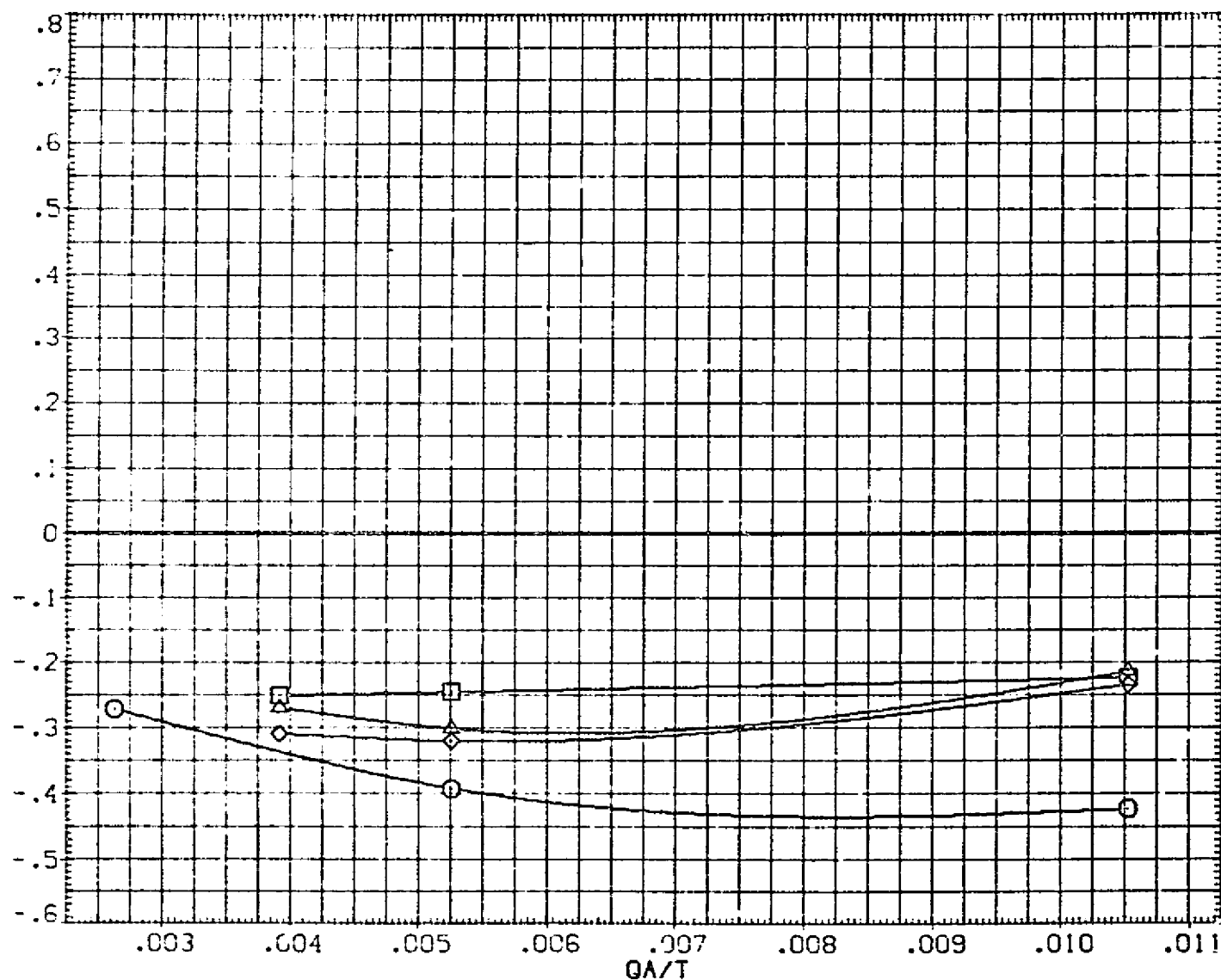


FIGURE 94. AREA RATIO EFFECTS, R/H UP FIRING JETS

(F) ALPHA = 2.00

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION
(SJA075)	□	01N32 LARC CFHT 118 (MA-22)
(SJA076)	□	01N36 LARC CFHT 118 (MA-22)
(SJA077)	◇	01N48 LARC CFHT 118 (MA-22)
(SJA079)	△	01N44 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BD FLAP	BETA	REFERENCE INFORMATION		
.000	2.000	.000	.000	SREF	2690.0000	50. FT.
.000	2.000	.000	.000	LREF	474.8000	INCHES
.000	2.000	.000	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. XO
				YMRP	.0000	IN. YO
				ZMRP	375.0000	IN. ZO
				SCALE	.0100	

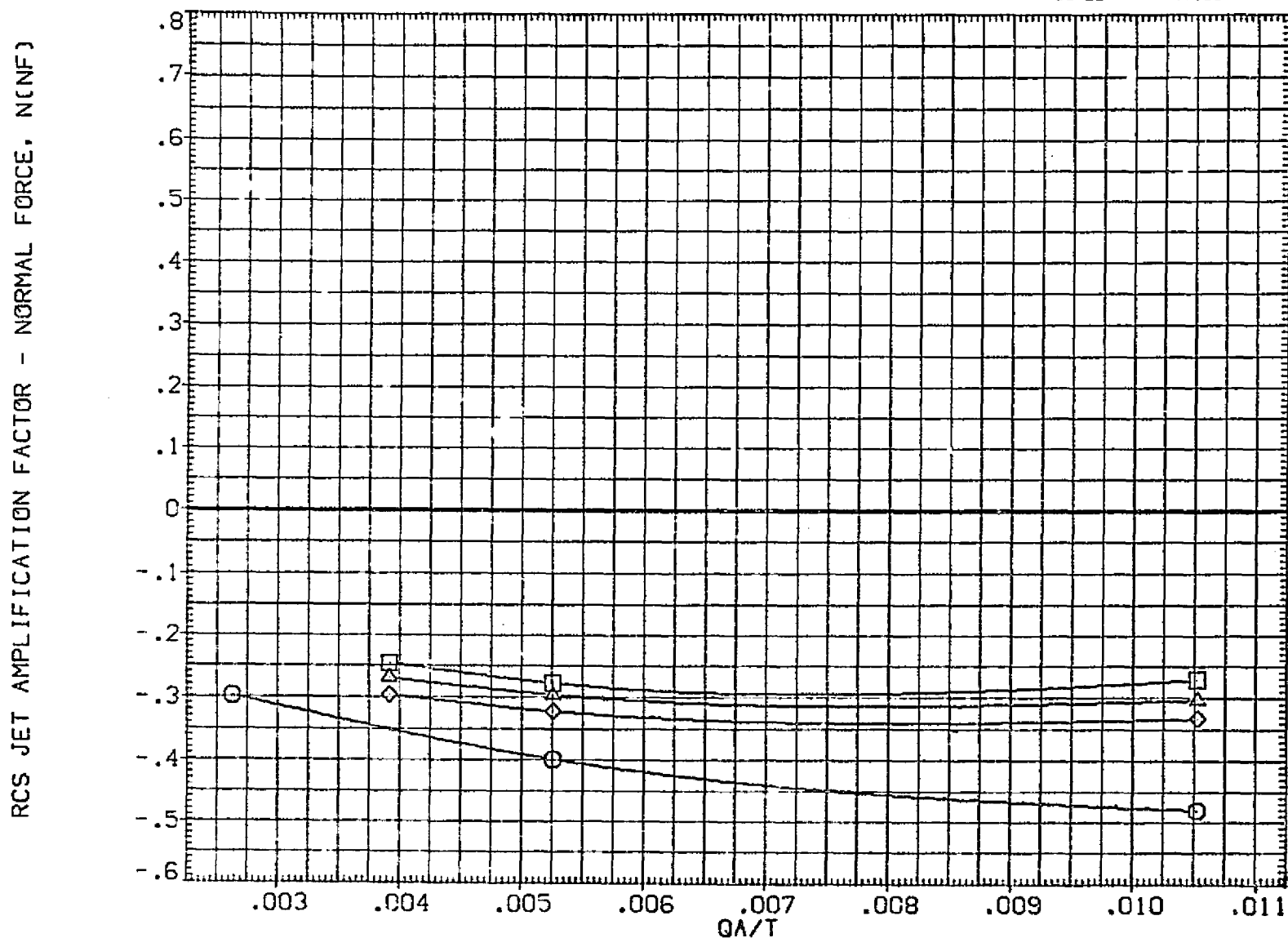


FIGURE 94. AREA RATIO EFFECTS, R/H UP FIRING JETS
(G) ALPHA = 4.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA075) □	G1N32 LARC CFHT 118 (MA-22)
(SJA076) △	G1N36 LARC CFHT 118 (MA-22)
(SJA077) ◇	G1N48 LARC CFHT 118 (MA-22)
(SJA078) △	G1N44 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BD FLAP	BETA	REFERENCE INFORMATION	
.000	2.000	.000	.000	SREF	2690.0000 SQ. FT.
.000	2.000	.000	.000	LREF	474.8000 INCHES
.000	2.000	.000	.000	BREF	936.6800 INCHES
.000	2.000	.000	.000	XMRP	1076.7000 IN. XC
				YMRP	.0000 IN. YC
				ZMRP	375.0000 IN. ZC
				SCALE	.0100

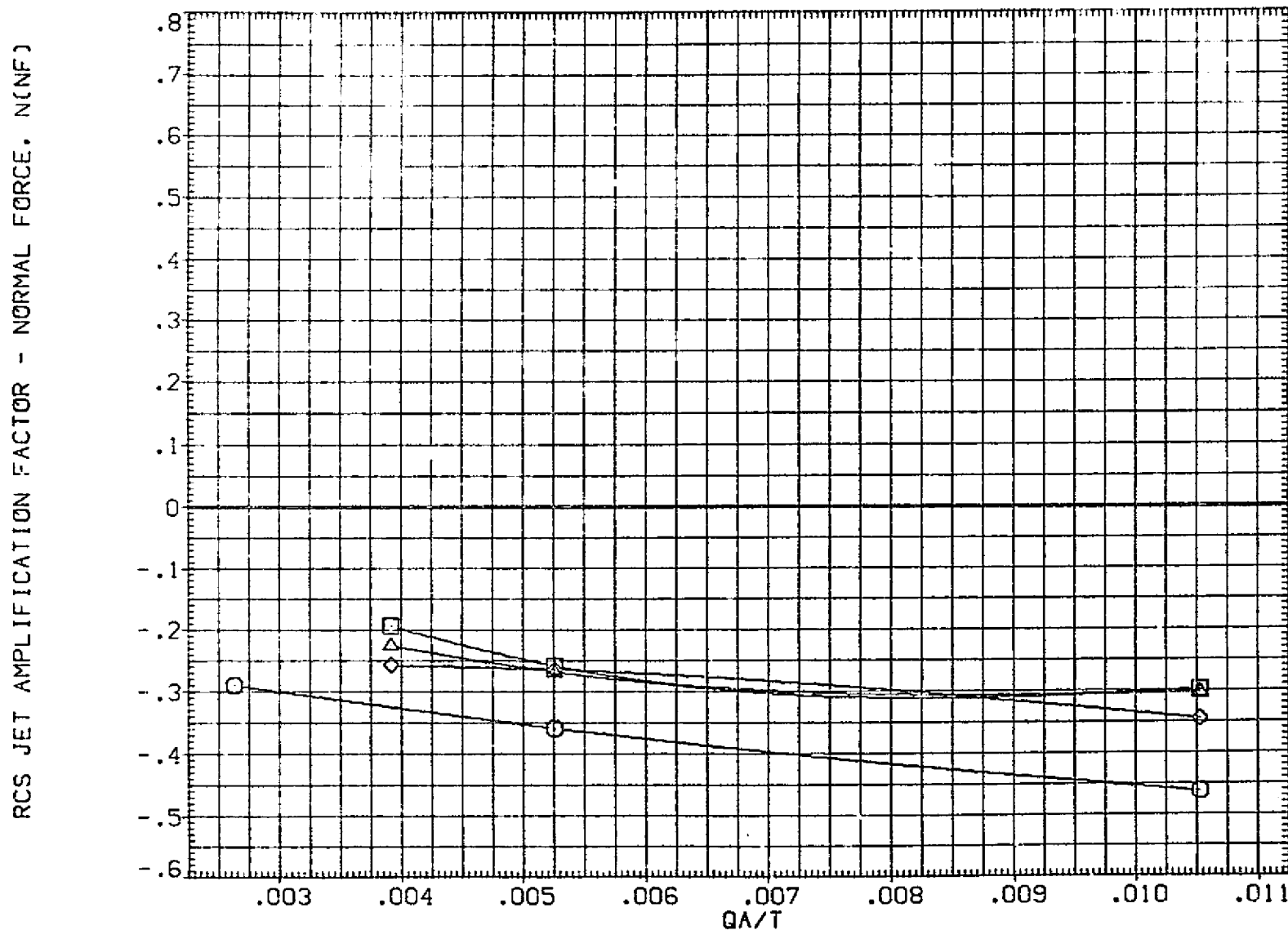


FIGURE 94. AREA RATIO EFFECTS, R/H UP FIRING JETS

(H) ALPHA = 6.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA075)	01N32 LARC CFHT 118 (MA-22)
(SJA076)	01N36 LARC CFHT 118 (MA-22)
(SJA077)	01N48 LARC CFHT 118 (MA-22)
(SJA078)	01N44 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BD FLAP	BETA	REFERENCE INFORMATION
.000	2.000	.000	.000	SREF 2690.0000 SQ. FT.
.000	2.000	.000	.000	LREF 474.8000 INCHES
.000	2.000	.000	.000	BREF 936.6800 INCHES
.000	2.000	.000	.000	XMRP 1076.7000 IN. XO
				YMRP .0000 IN. YO
				ZMRP 375.0000 IN. ZO
				SCALE .0100

RCS JET AMPLIFICATION FACTOR - NORMAL FORCE, N(NF)

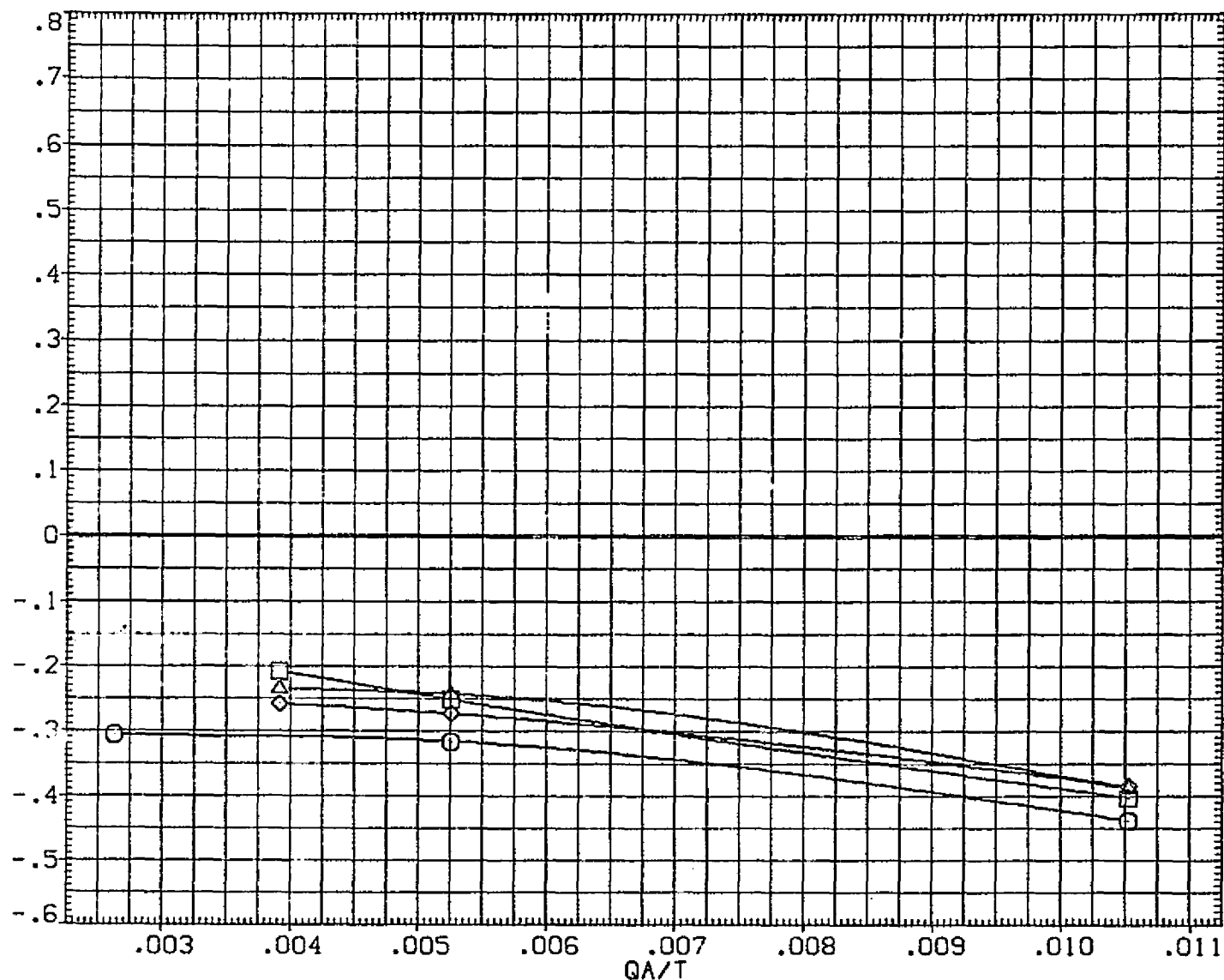


FIGURE 94. AREA RATIO EFFECTS, R/H UP FIRING JETS

(I) ALPHA = 8.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA075)	01N32 LARC CFHT 118 (MA-22)
(SJA076)	01N36 LARC CFHT 118 (MA-22)
(SJA077)	01N48 LARC CFHT 118 (MA-22)
(SJA078)	01N44 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BD FLAP	BETA	REFERENCE INFORMATION
.000	2.000	.000	.000	SREF 2690.0000 SQ. FT.
.000	2.000	.000	.000	LREF 474.8000 INCHES
.000	2.000	.000	.000	BREF 936.6800 INCHES
.000	2.000	.000	.000	XMRP 1076.7000 IN. X0
				YMRP .0000 IN. Y0
				ZMRP 375.0000 IN. Z0
				SCALE .0100

RCS JET AMPLIFICATION FACTOR - NORMAL FORCE, N(NF)

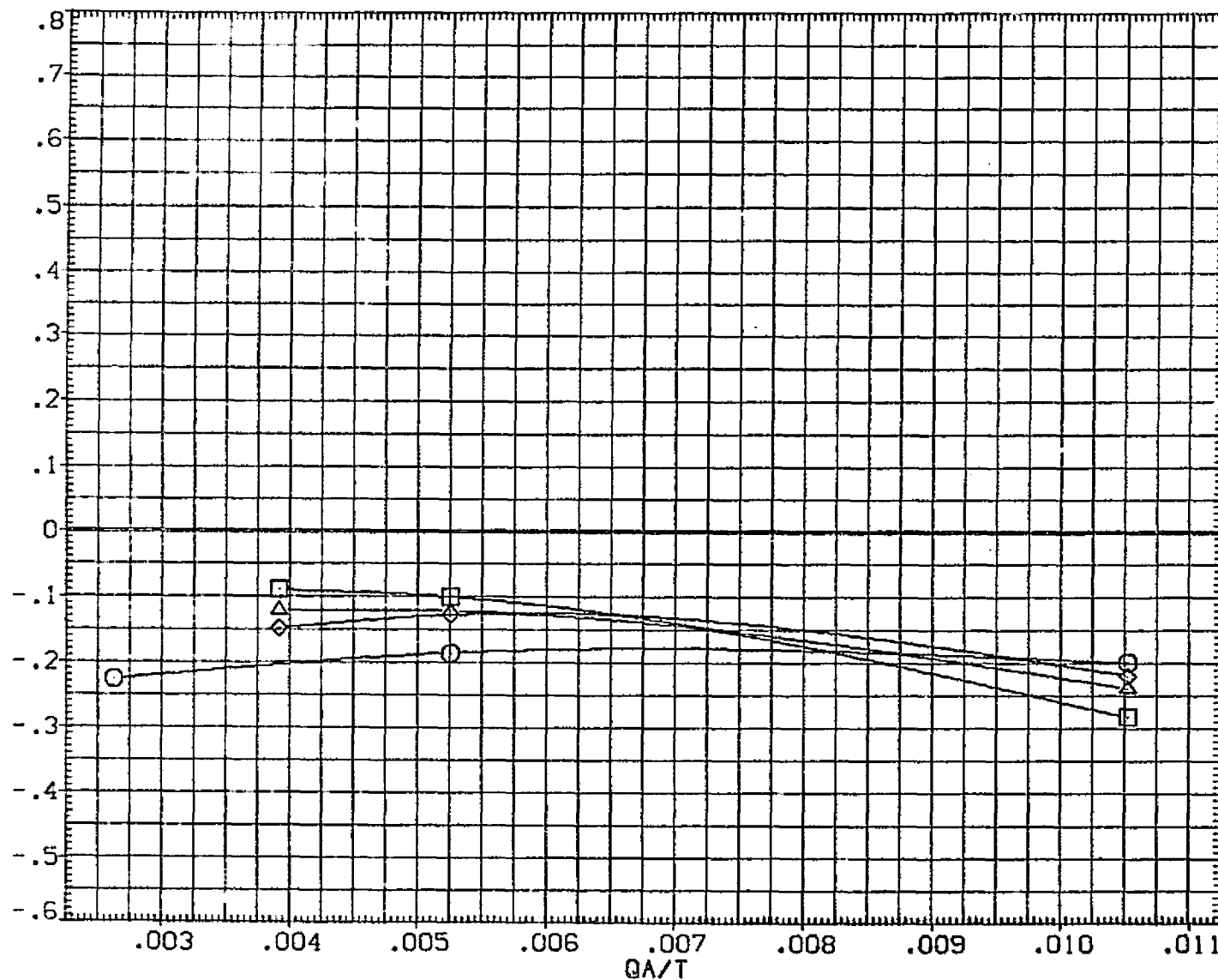


FIGURE 94. AREA RATIO EFFECTS, R/H UP FIRING JETS

(J) ALPHA = 10.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA075)	01N32 LARC CFH: 118 (MA-22)
(SJA076)	01N36 LARC CFHT 118 (MA-22)
(SJA077)	01N48 LARC CFHT 118 (MA-22)
(SJA078)	01N44 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BD FLAP	BETA	REFERENCE INFORMATION
.000	2.000	.000	.000	SREF 2690.0000 SQ. FT.
.000	2.000	.000	.000	LREF 474.8000 INCHES
.000	2.000	.000	.000	BREF 936.6800 INCHES
.000	2.000	.000	.000	XMRP 1076.7000 IN. X0
				YMRP .0000 IN. Y0
				ZMRP 375.0000 IN. Z0
				SCALE .0100

RCS JET AMPLIFICATION FACTOR - NORMAL FORCE, N(NF)

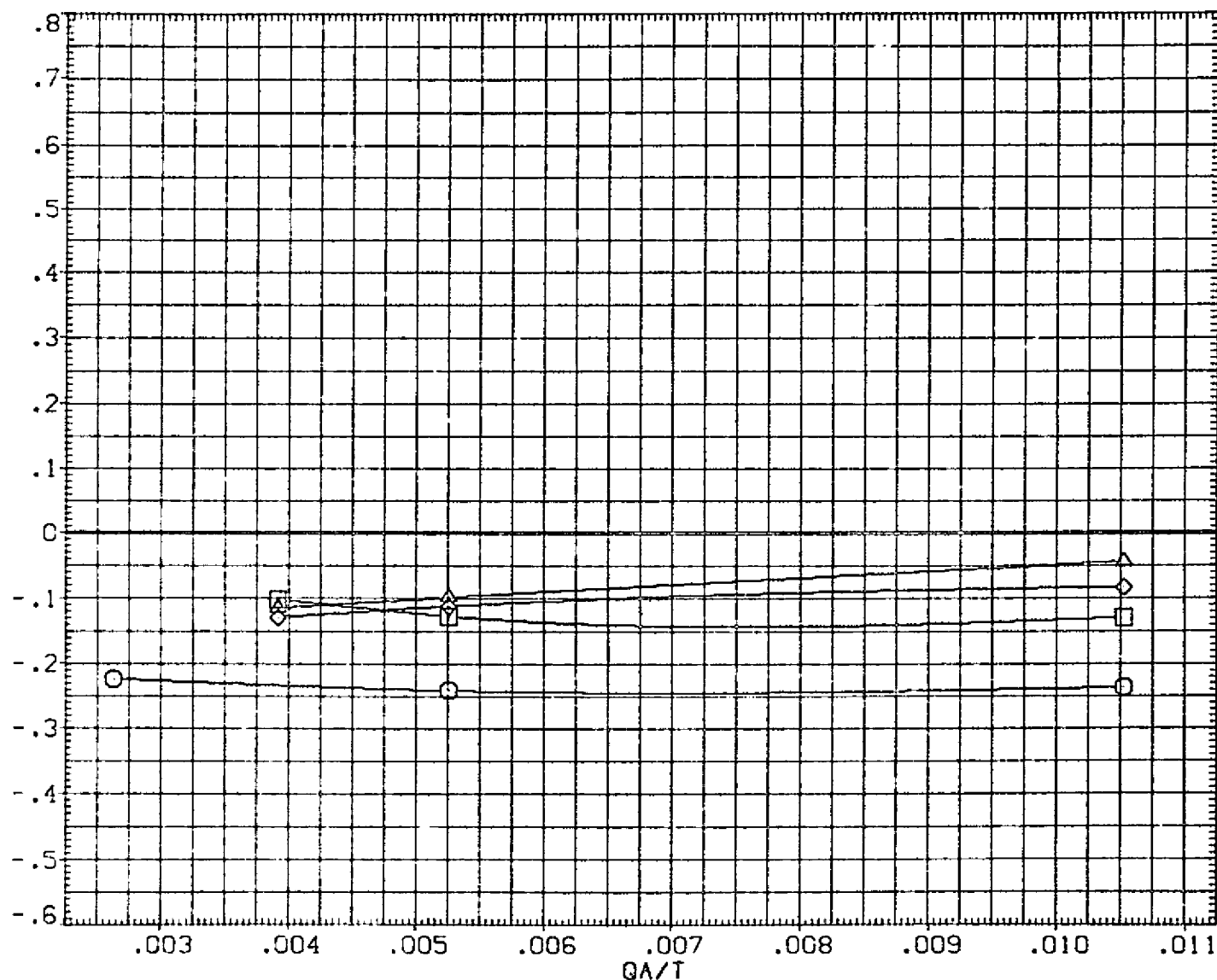


FIGURE 94. AREA RATIO EFFECTS, R/H UP FIRING JETS

(K) ALPHA = 15.00

DATA SET	SYMBOL	CONFIGURATION	DESCRIPTION
(SJA075)	○	01N32	LARC CFHT 118 (MA-22)
(SJA076)	□	01N36	LARC CFHT 118 (MA-22)
(SJA077)	◇	01N48	LARC CFHT 118 (MA-22)
(SJA078)	△	01N44	LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BOFLAP	BETA	REFERENCE INFORMATION		
.000	2.000	.000	.000	SREF	2690.0000	50. FT.
.000	2.000	.000	.000	LREF	474.8000	INCHES
.000	2.000	.000	.000	BREF	936.8000	INCHES
.000	2.000	.000	.000	XMRP	1076.0000	IN. X0
.000	2.000	.000	.000	YMRP	.0000	IN. Y0
.000	2.000	.000	.000	ZMRP	375.0000	IN. Z0
				SCALE	.0100	

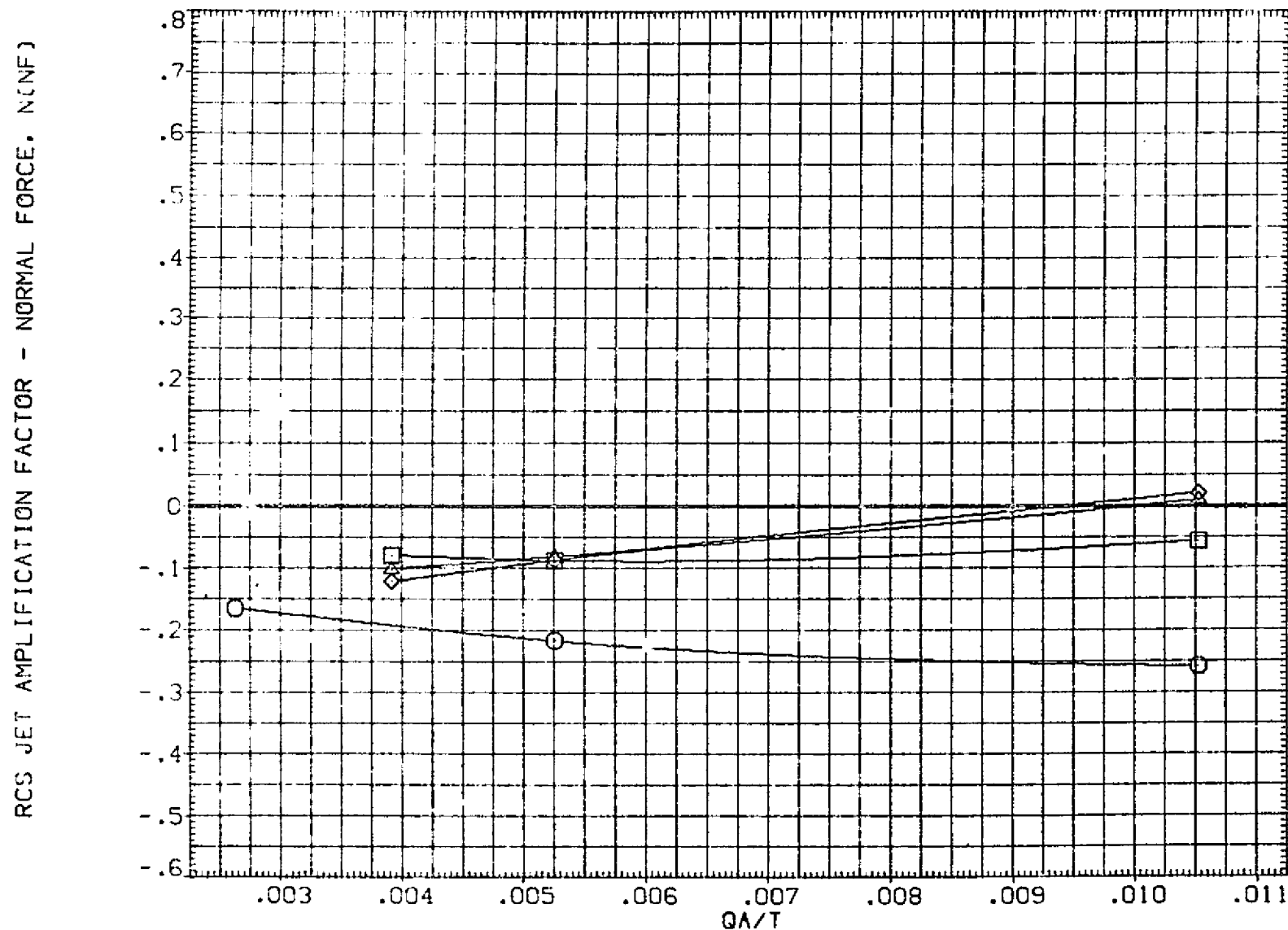


FIGURE 94. AREA RATIO EFFECTS, R/H UP FIRING JETS

(L) ALPHA = 20.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA075) ○	01N32 LARC CFHT 118 (MA-22)
(SJA076) □	01N36 LARC CFHT 118 (MA-22)
(SJA077) ◇	01N48 LARC CFHT 118 (MA-22)
(SJA078) △	01N44 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BD FLAP	BETA	REFERENCE INFORMATION		
.000	2.000	.000	.000	SREF	2690.0000	50. FT.
.000	2.000	.000	.000	LREF	474.8000	INCHES
.000	2.000	.000	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - NORMAL FORCE, N(NF)

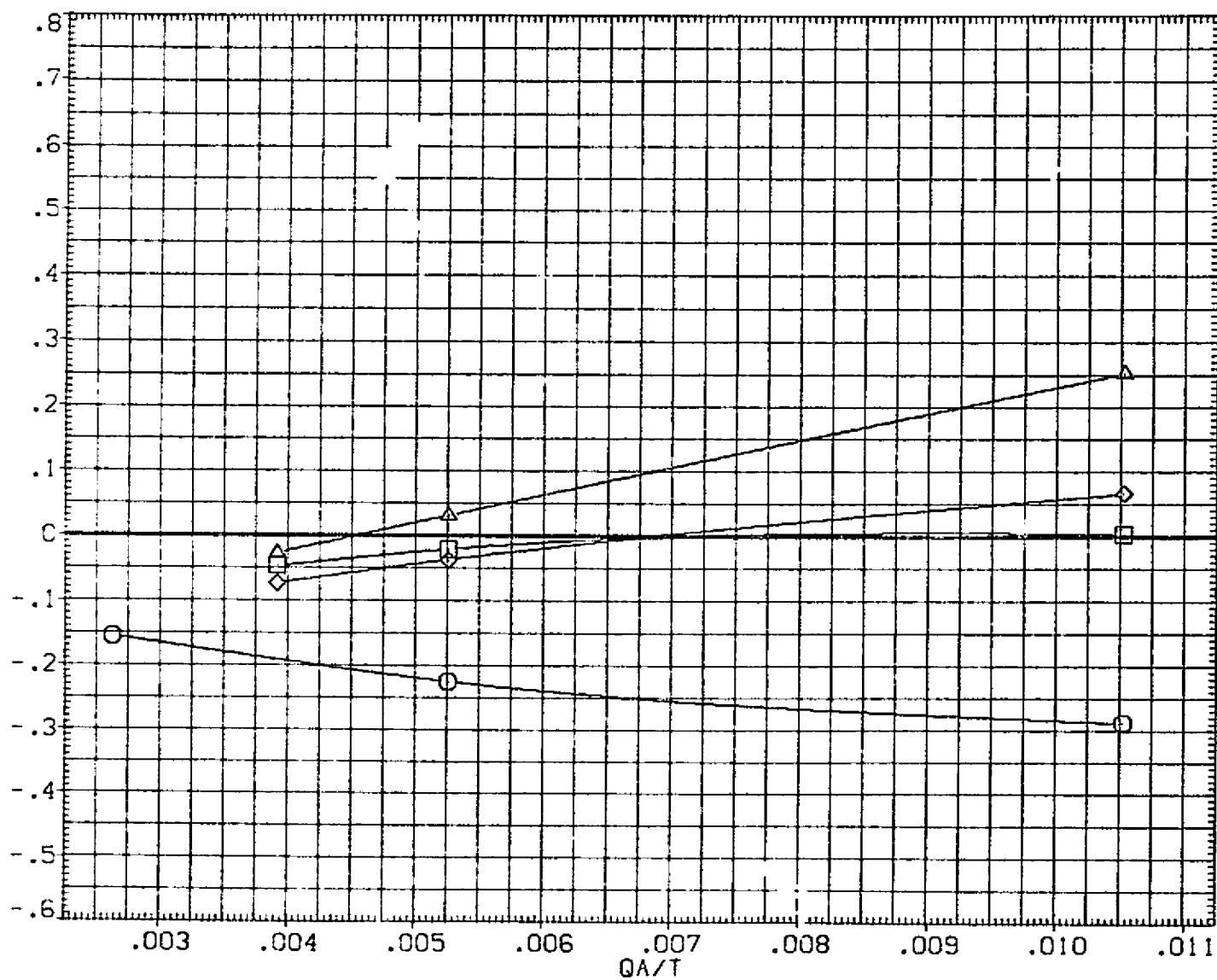


FIGURE 94. AREA RATIO EFFECTS, R/H UP FIRING JETS

(M)A_PHA = 25.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	NO. JET	BDFLAP	BETA	REFERENCE INFORMATION		
(SJA075)	01N32 LARG CFHT 118 (MA-22)	.000	2.000	.000	.000	SREF	2690.0000	50. FT.
(SJA076)	01N36 LARG CFHT 118 (MA-22)	.000	2.000	.000	.000	LREF	474.8000	INCHES
(SJA077)	01N48 LARG CFHT 118 (MA-22)	.000	2.000	.000	.000	BREF	936.6800	INCHES
(SJA078)	01N44 LARG CFHT 118 (MA-22)	.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
						YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0100	

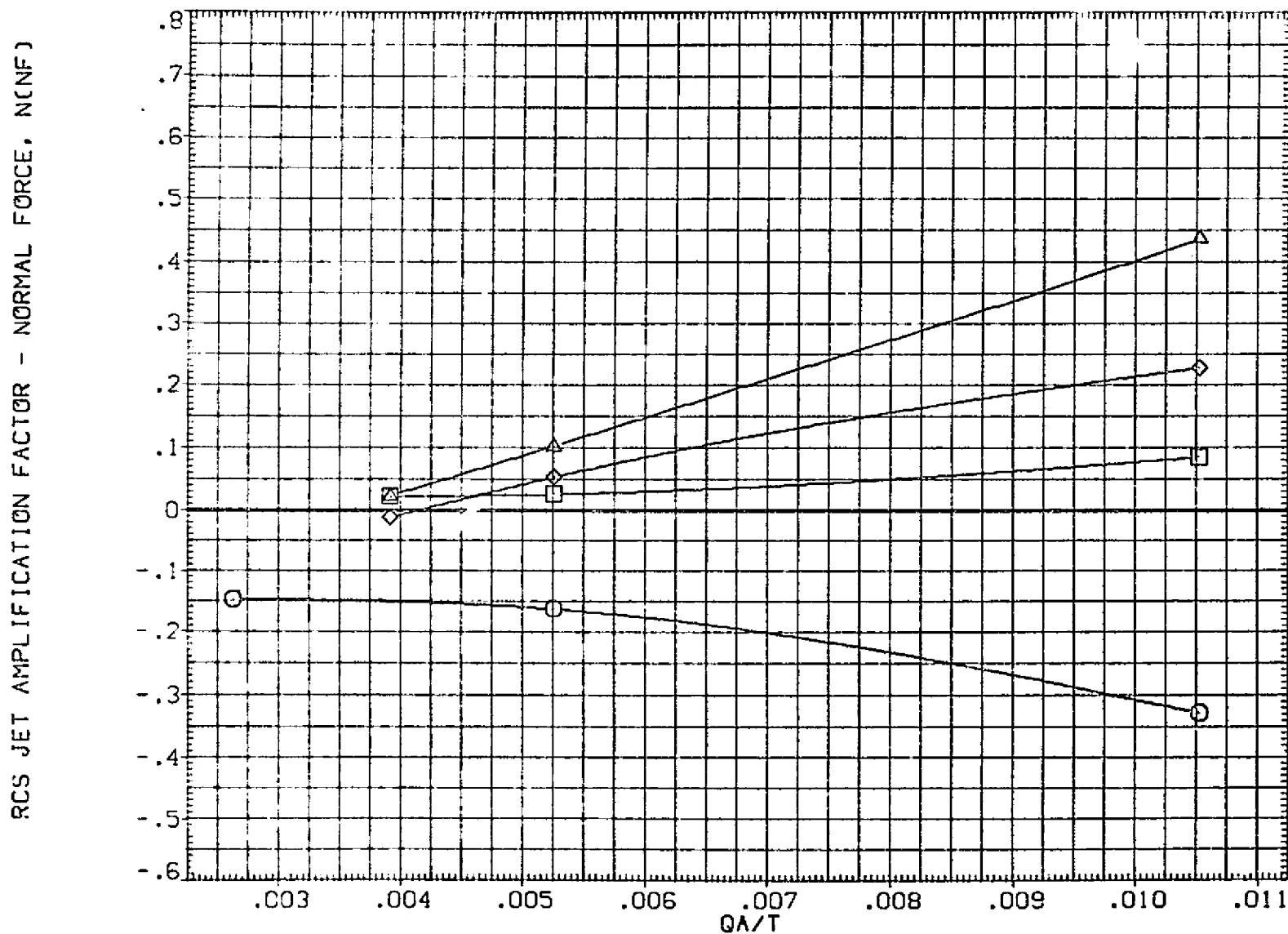


FIGURE 94. AREA RATIO EFFECTS, R/H UP FIRING JETS

(N)ALPHA = 30.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	NO. JET	BD FLAP	BETA	REFERENCE INFORMATION		
(SJA075)	Q1N32 LARC CFHT 118 (MA-22)	.000	2.000	.000	.000	SREF	2690.0000	SQ. FT.
(SJA076)	Q1N36 LARC CFHT 118 (MA-22)	.000	2.000	.000	.000	LREF	474.8000	INCHES
(SJA077)	Q1N48 LARC CFHT 118 (MA-22)	.000	2.000	.000	.000	BREF	936.6800	INCHES
(SJA078)	Q1N44 LARC CFHT 118 (MA-22)	.000	2.000	.000	.000	XMRP	1076.7000	IN. XO
						YMRP	.0000	IN. YO
						ZMRP	375.0000	IN. ZO
						SCALE	.0100	

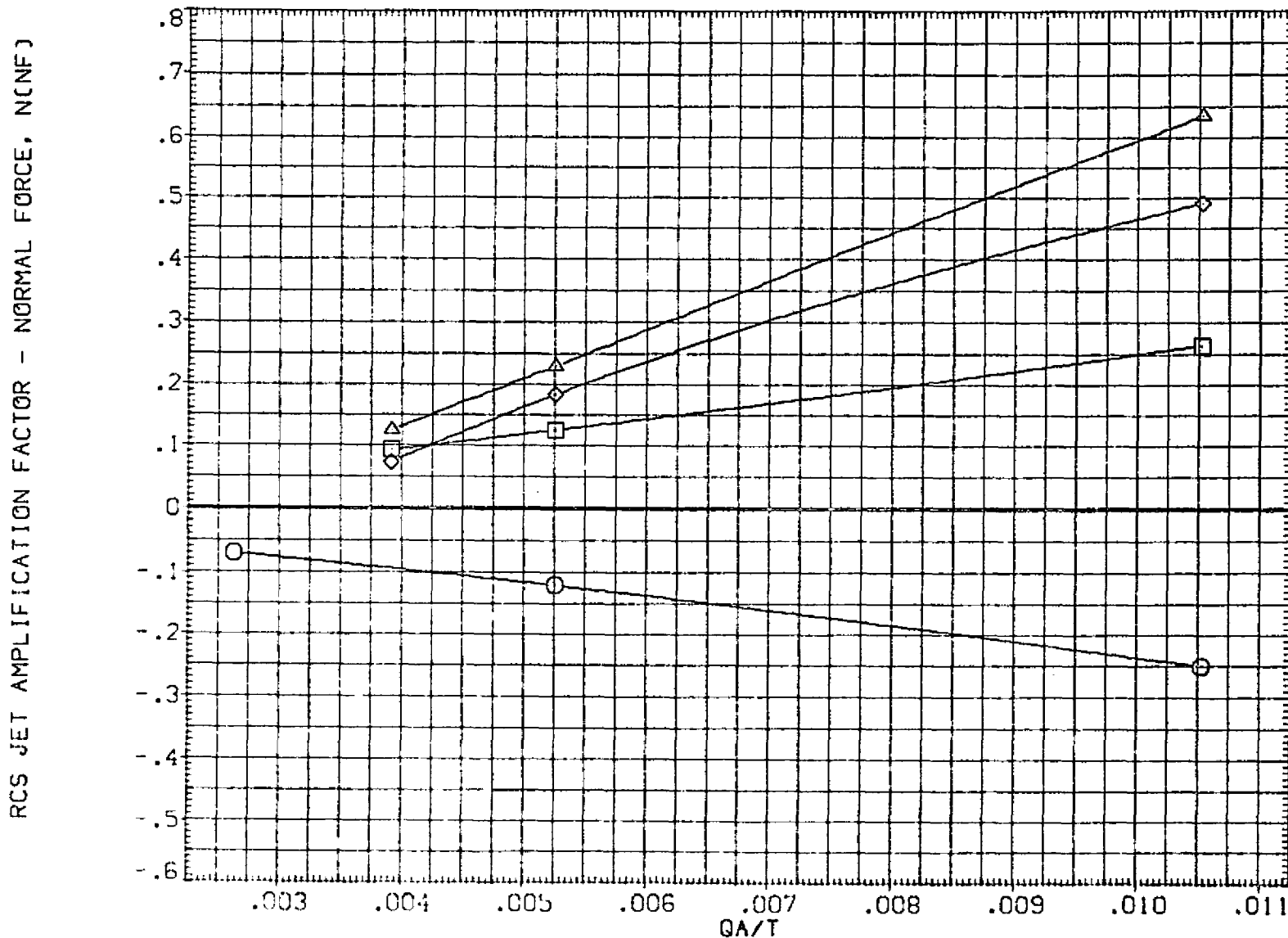


FIGURE 94. AREA RATIO EFFECTS, R/H UP FIRING JETS

(S) ALPHA = 35.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	NO. JET	BDFLAP	BETA	REFERENCE INFORMATION		
(SJA075)	01N32 LARC CFMT 118 (MA-22)	.000	2.000	.000	.000	SREF	2690.0000	SQ. FT.
(SJA076)	01N36 LARC CFMT 118 (MA-22)	.000	2.000	.000	.000	LREF	474.8000	INCHES
(SJA077)	01N48 LARC CFMT 118 (MA-22)	.000	2.000	.000	.000	BREF	936.6800	INCHES
(SJA078)	01N44 LARC CFMT 118 (MA-22)	.000	2.000	.000	.000	XMRF	1076.7000	IN. X0
						YMRF	.0000	IN. Y0
						ZMRF	375.0000	IN. Z0
						SCALE	.0100	

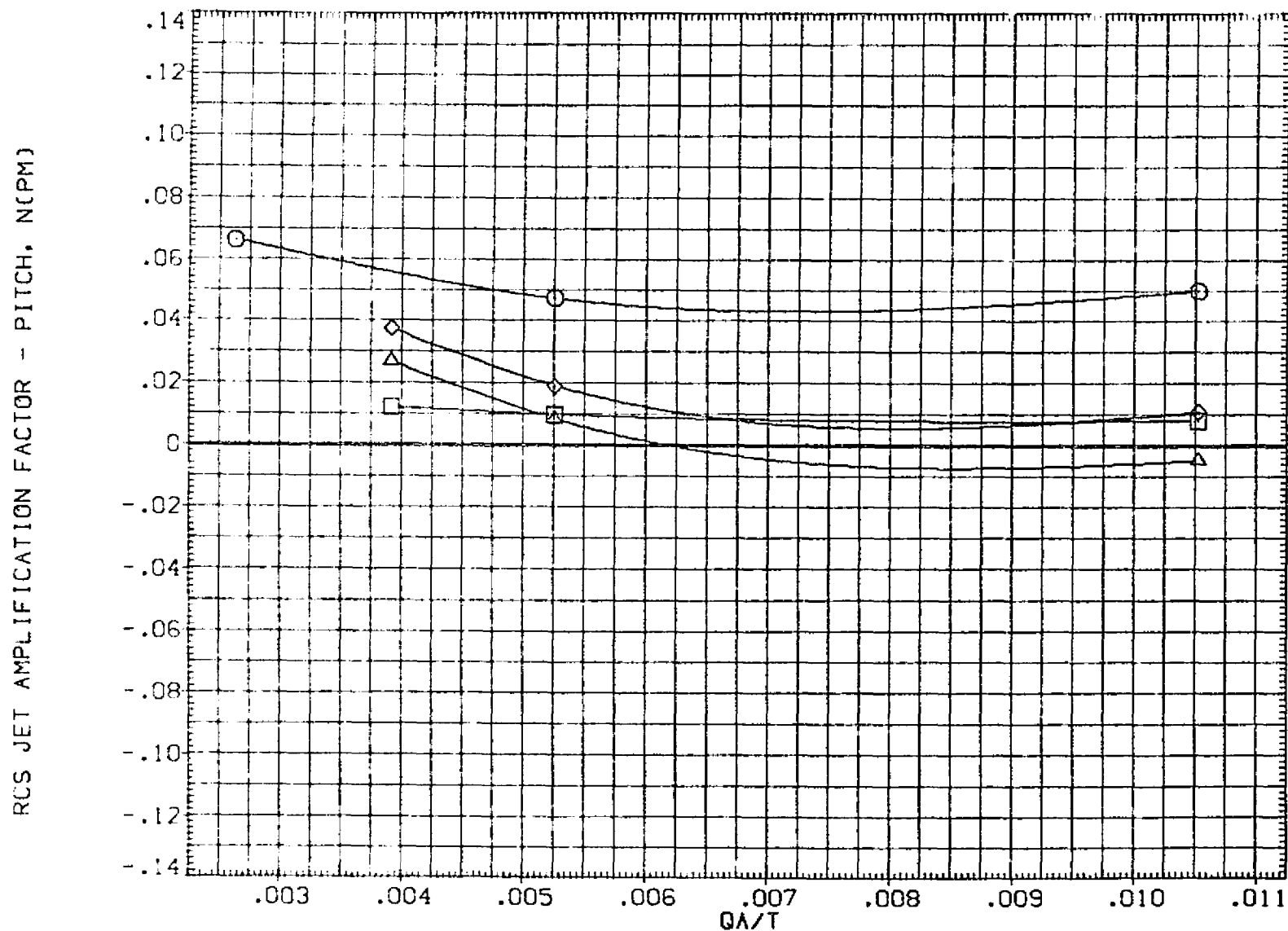


FIGURE 94. AREA RATIO EFFECTS, R/H UP FIRING JETS

(A) ALPHA = -8.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA075)	01N32 LARC CFHT 118 (MA-22)
(SJA076)	01N36 LARC CFHT 118 (MA-22)
(SJA077)	01N48 LARC CFHT 118 (MA-22)
(SJA078)	01N44 LARC CFHT 118 (MA-22)

ELEVON	NO.JET	BDFLAP	BETA	REFERENCE INFORMATION
.000	2.000	.000	.000	SREF 2690.0000 SQ.FT.
.000	2.000	.000	.000	LREF 474.8000 INCHES
.000	2.000	.000	.000	BREF 936.6800 INCHES
.000	2.000	.000	.000	XMRP 1076.7000 IN. X0
				YMRP .0000 IN. Y0
				ZMRP 375.0000 IN. Z0
				SCALE .0100

RCS JET AMPLIFICATION FACTOR - PITCH, N(PM)

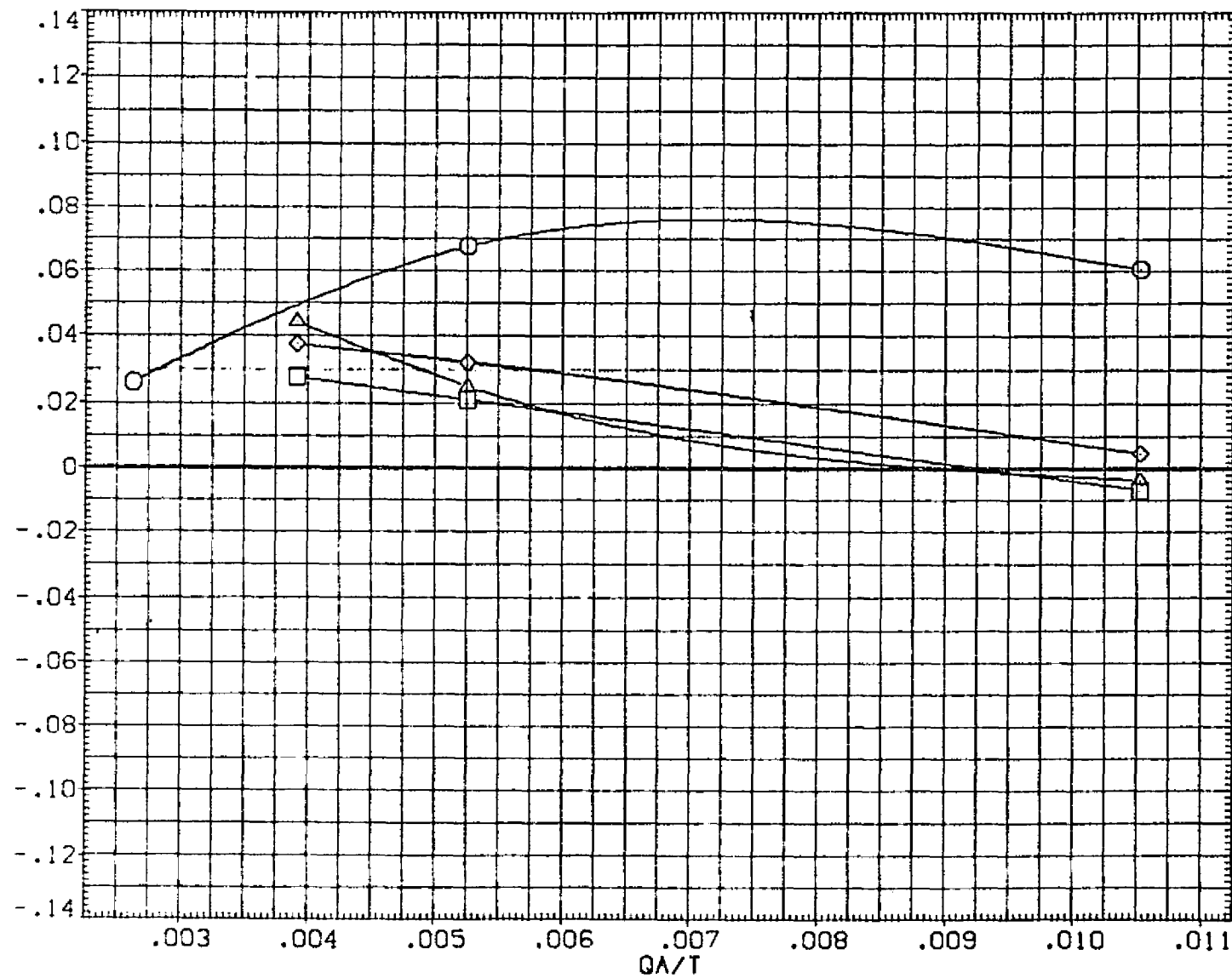


FIGURE 94. AREA RATIO EFFECTS, R/H UP FIRING JETS

(B) ALPHA = -6.00

DATA SET	SYMBOL	CONFIGURATION	DESCRIPTION
(SJA075)	○	01N32	LARC CFHT 118 (MA-22)
(SJA076)	□	01N36	LARC CFHT 118 (MA-22)
(SJA077)	◇	01N48	LARC CFHT 118 (MA-22)
(SJA078)	△	01N44	LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BDFLAP	BETA	REFERENCE INFORMATION		
.000	2.000	.000	.000	SREF	2690.0000	SQ. FT.
.000	2.000	.000	.000	LREF	474.8000	INCHES
.000	2.000	.000	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. XC
				YMRP	.0000	IN. YO
				ZMRP	375.0000	IN. ZO
				SCALE	.0100	

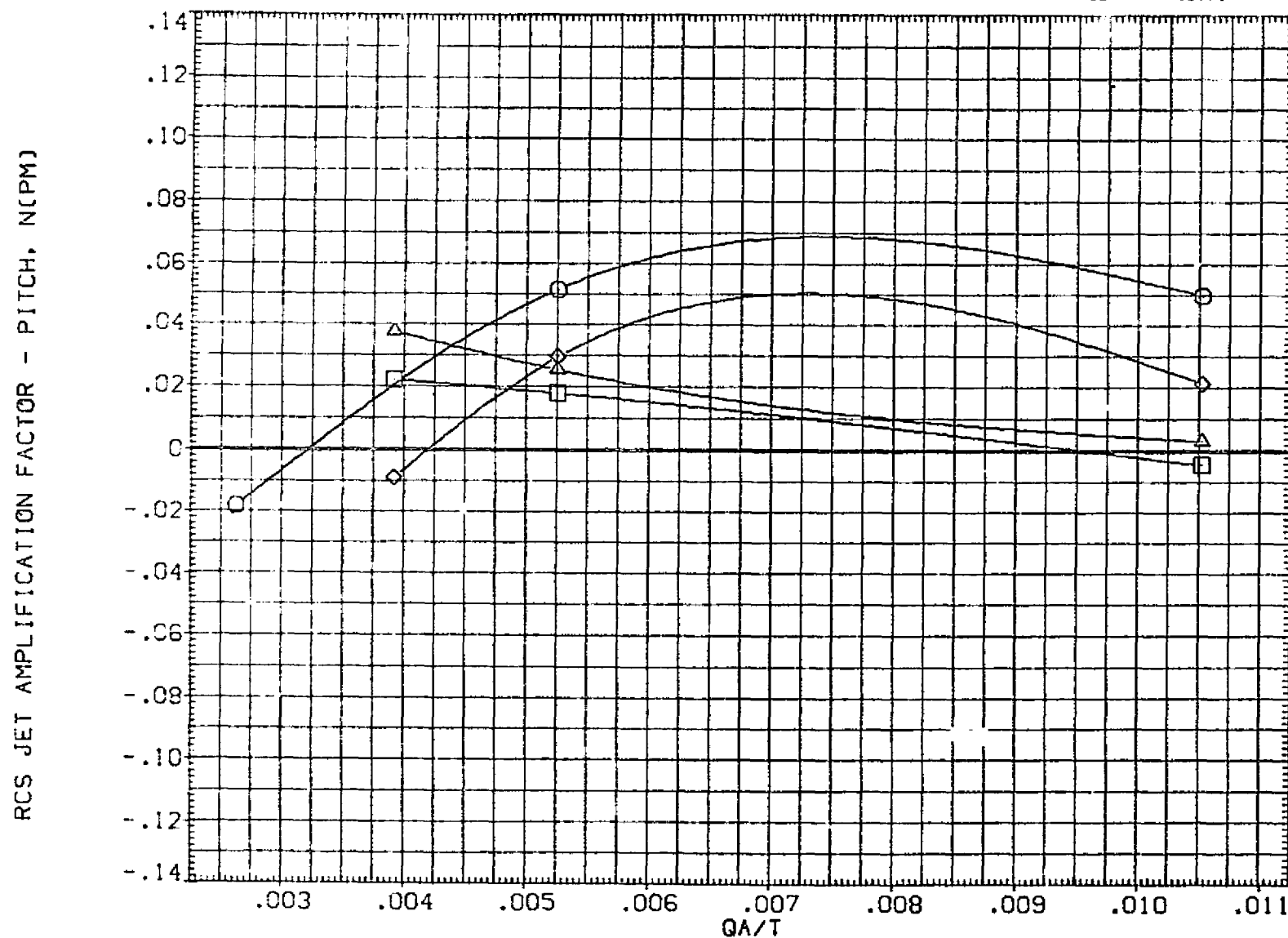


FIGURE 94. AREA RATIO EFFECTS, R/H UP FIRING JETS
(C) ALPHA = -4.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA075) ○	01N32 LARC CFHT 118 (MA-22)
(SJA076) □	01N36 LARC CFHT 118 (MA-22)
(SJA077) ◇	01N48 LARC CFHT 118 (MA-22)
(SJA078) △	01N44 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BO FLAP	BETA	REFERENCE INFORMATION		
.000	2.000	.000	.000	SREF	2690.0000	50. FT.
.000	2.000	.000	.000	LREF	474.8000	INCHES
.000	2.000	.000	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.0100	

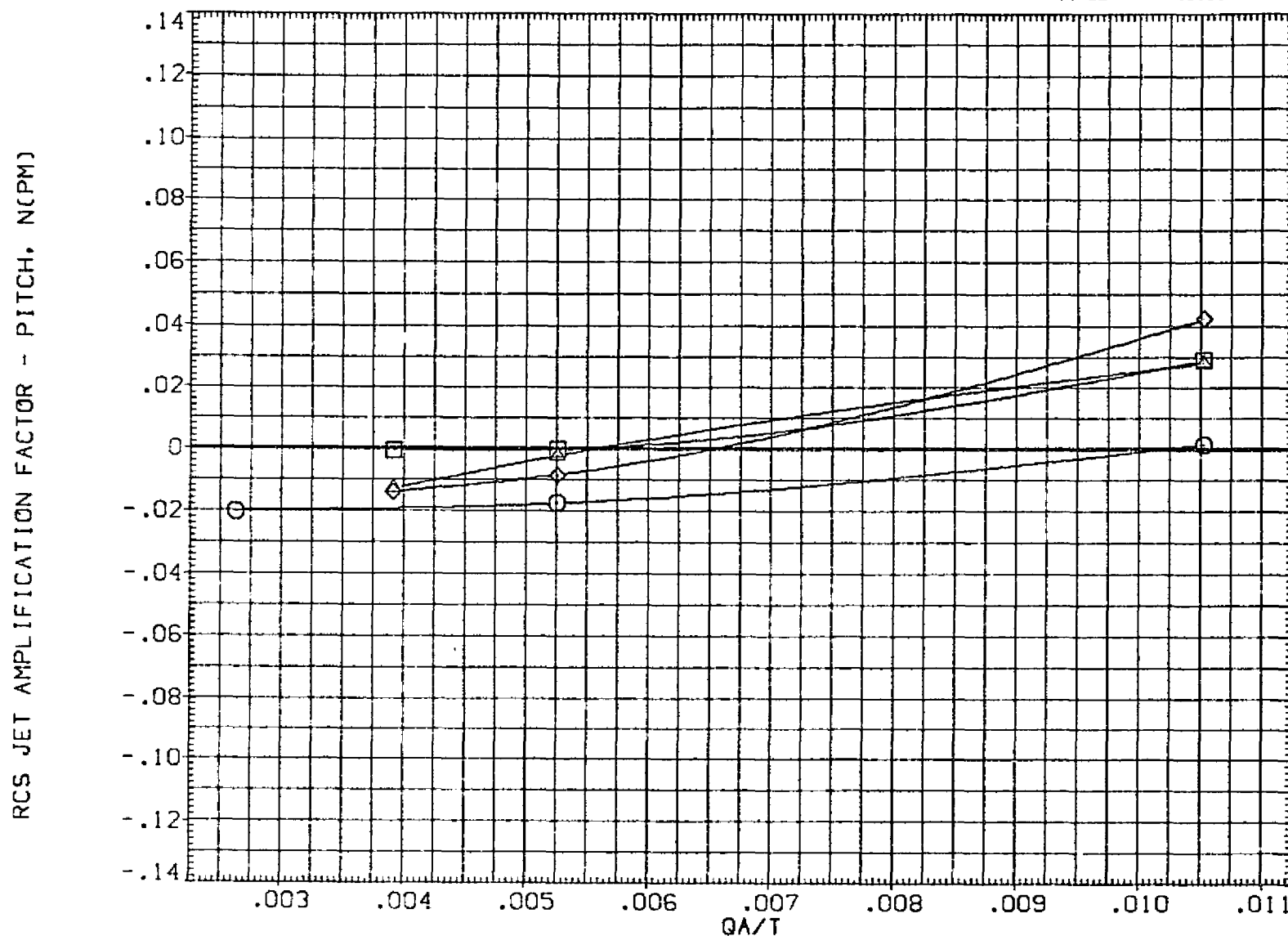


FIGURE 94. AREA RATIO EFFECTS, R/H UP FIRING JETS

(C) ALPHA = -2.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA075)	01N32 LARC CFHT 118 (MA-22)
(SJA076)	01N36 LARC CFHT 118 (MA-22)
(SJA077)	01N48 LARC CFHT 118 (MA-22)
(SJA078)	01N44 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BD FLAP	BETA	REFERENCE INFORMATION		
.000	2.000	.000	.000	SREF	2690.0000	SQ. FT.
.000	2.000	.000	.000	LREF	474.8000	INCHES
.000	2.000	.000	.000	BREF	536.6800	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - PITCH, N(PM)

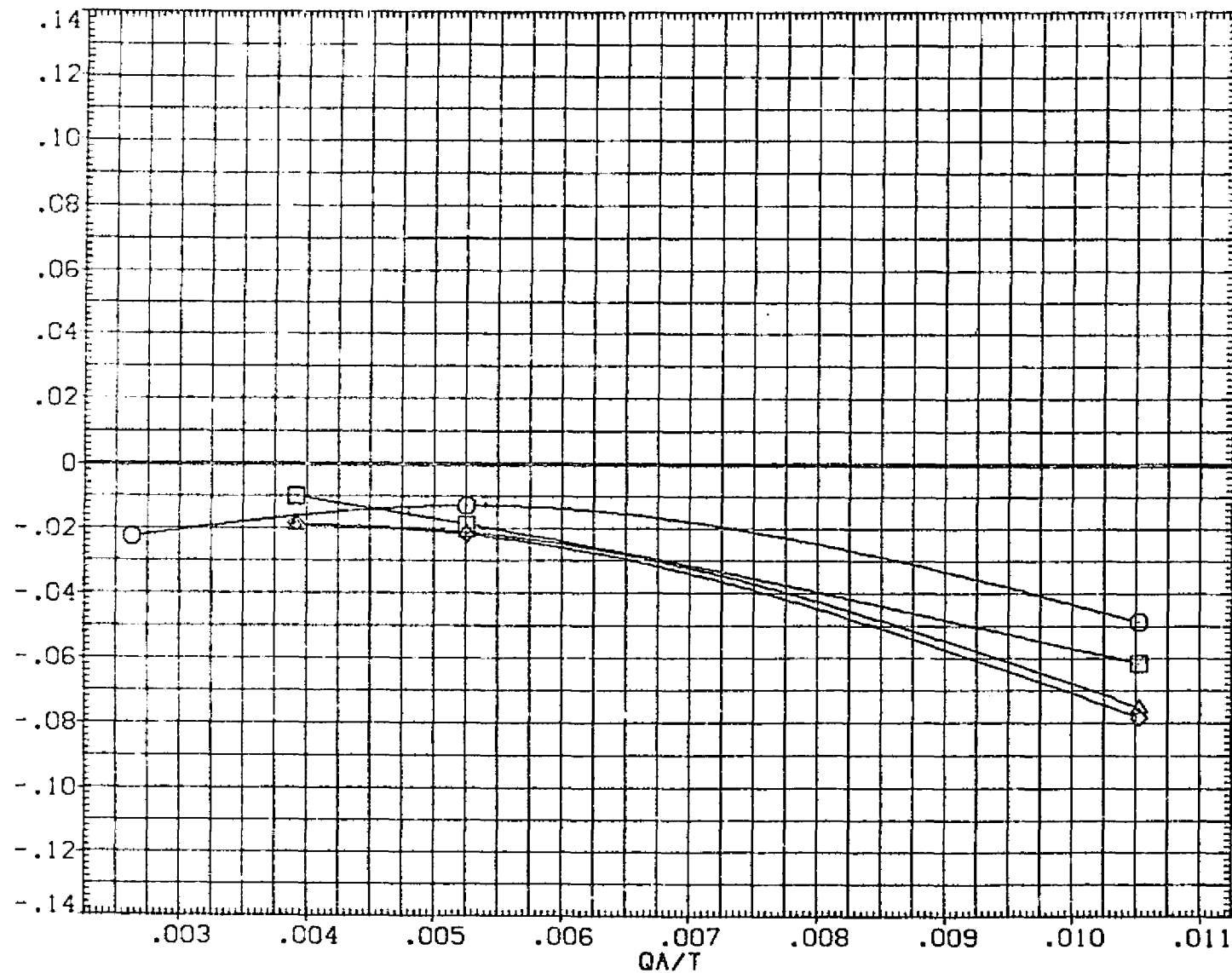


FIGURE 94. AREA RATIO EFFECTS, R/H UP FIRING JETS
(E) ALPHA = .00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA075)	01N32 LARC CFHT 118 (MA-22)
(SJA076)	01N36 LARC CFHT 118 (MA-22)
(SJA077)	01N48 LARC CFHT 118 (MA-22)
(SJA078)	01N44 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BD FLAP	BETA	REFERENCE INFORMATION
.000	2.000	.000	.000	SREF 2690.0000 SQ. FT.
.000	2.000	.000	.000	LREF 474.8000 INCHES
.000	2.000	.000	.000	BREF 936.6800 INCHES
.000	2.000	.000	.000	XMRP 1076.7000 IN. X0
				YMRP .0000 IN. Y0
				ZMRP 375.0000 IN. Z0
				SCALE .0100

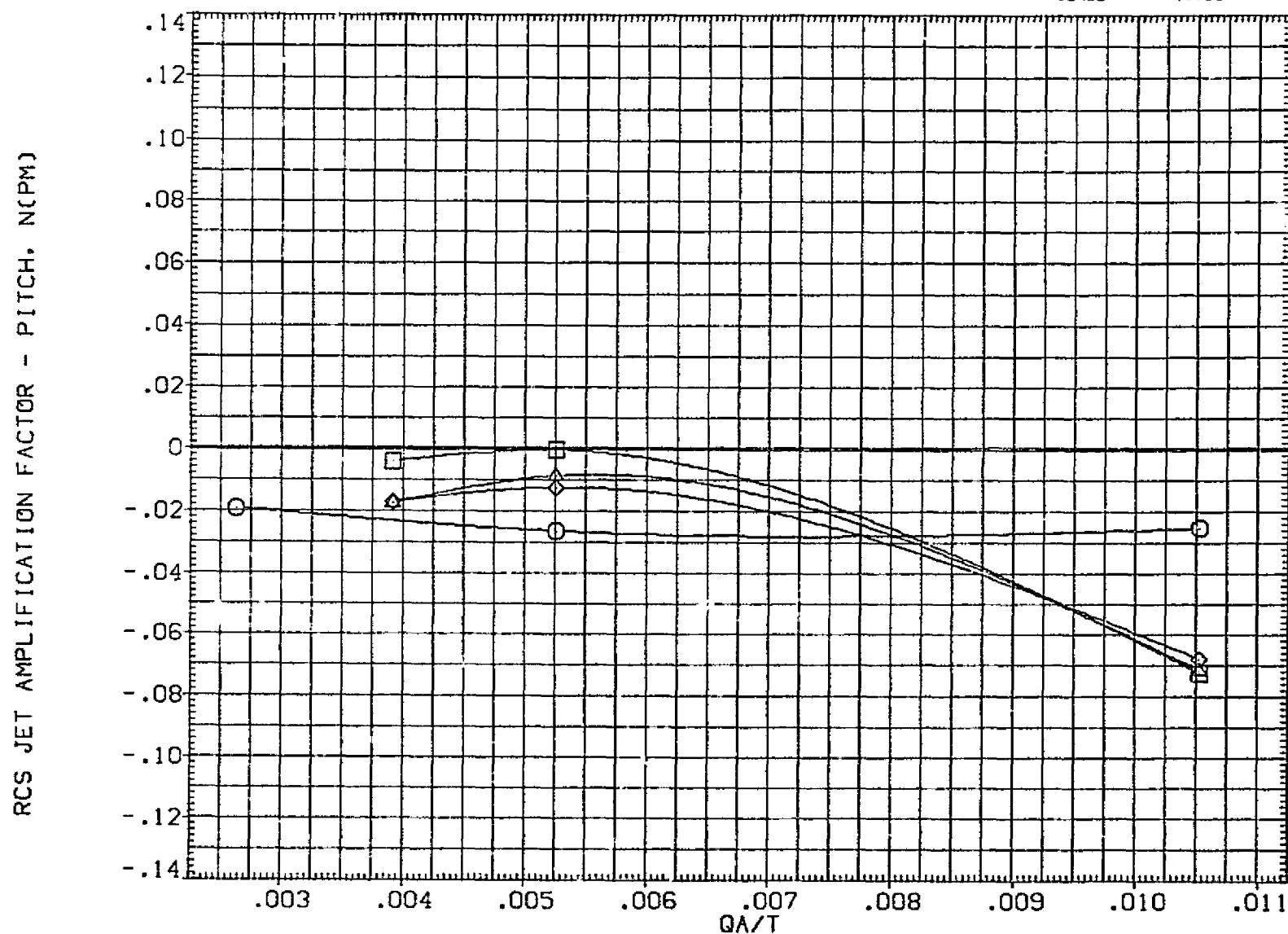


FIGURE 94. AREA RATIO EFFECTS, R/H UP FIRING JETS
(F) ALPHA = 2.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	NO. JET	BOFLAP	BETA	REFERENCE INFORMATION		
(SJA075)	01N32 LARC LIGHT 118 (MA-22)	.000	2.000	.000	.000	SREF	2690.0000	50. FT.
(SJA076)	01N36 LARC LIGHT 118 (MA-22)	.000	2.000	.000	.000	LREF	474.8000	INCHES
(SJA077)	01N48 LARC LIGHT 118 (MA-22)	.000	2.000	.000	.000	BREF	936.6800	INCHES
(SJA079)	01N44 LARC LIGHT 118 (MA-22)	.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
						YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - PITCH, N(PM)

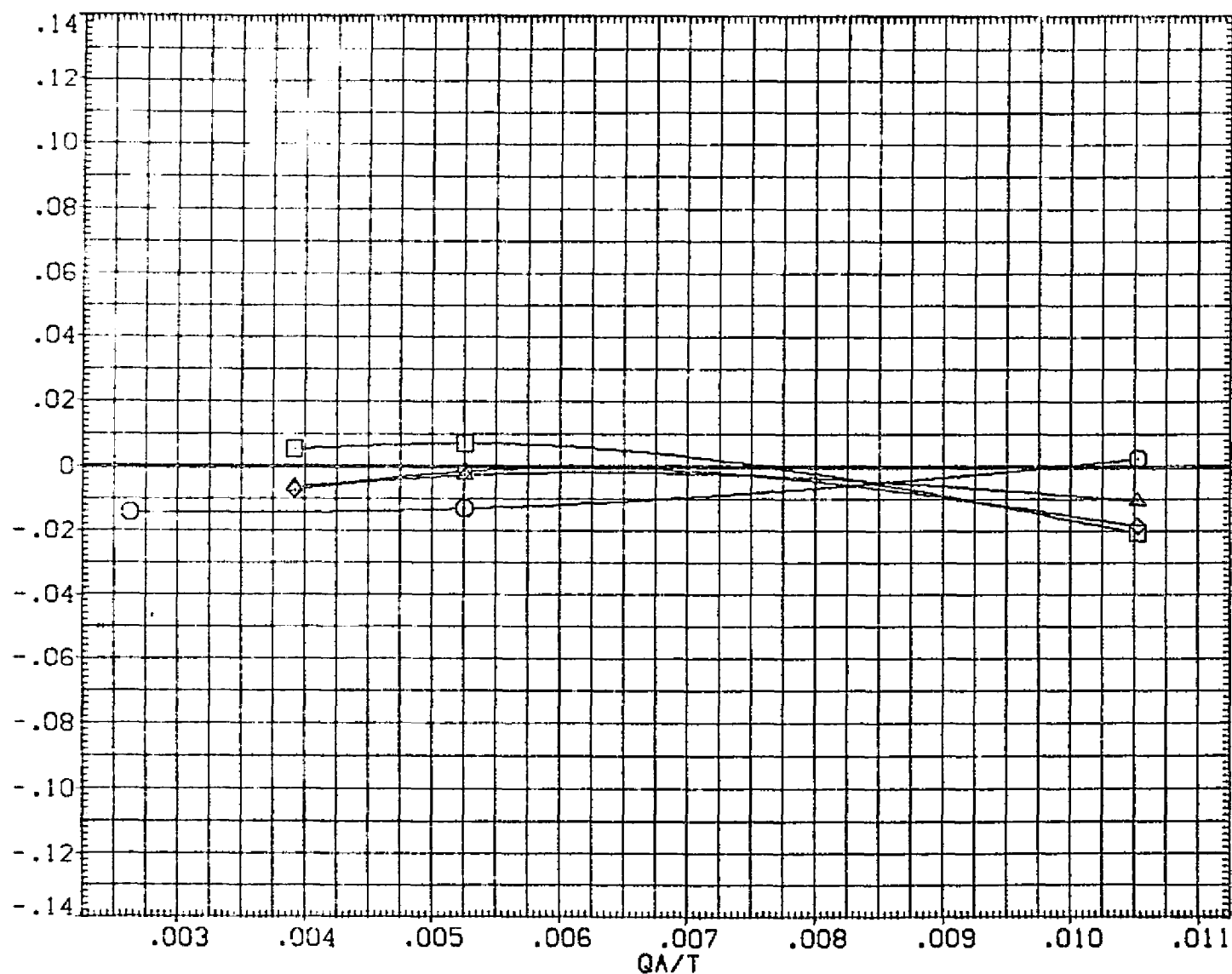


FIGURE 94. AREA RATIO EFFECTS, R/H UP FIRING JETS
(G) ALPHA = 4.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA075)	01N32 LARC CFHT 118 (MA-22)
(SJA076)	01N36 LARC CFHT 118 (MA-22)
(SJA077)	01N48 LARC CFHT 118 (MA-22)
(SJA078)	01N44 LARC CFHT 118 (MA-22)

ELEVON	NO.JET	BDFLAP	BETA	REFERENCE INFORMATION
.000	2.000	.000	.000	SREF 2690.0000 SQ.FT.
.000	2.000	.000	.000	LREF 474.8000 INCHES
.000	2.000	.000	.000	BREF 936.6800 INCHES
.000	2.000	.000	.000	XMRP 1076.7000 IN. X0
				YMRP .0000 IN. Y0
				ZMRP 375.0000 IN. Z0
				SCALE .0100

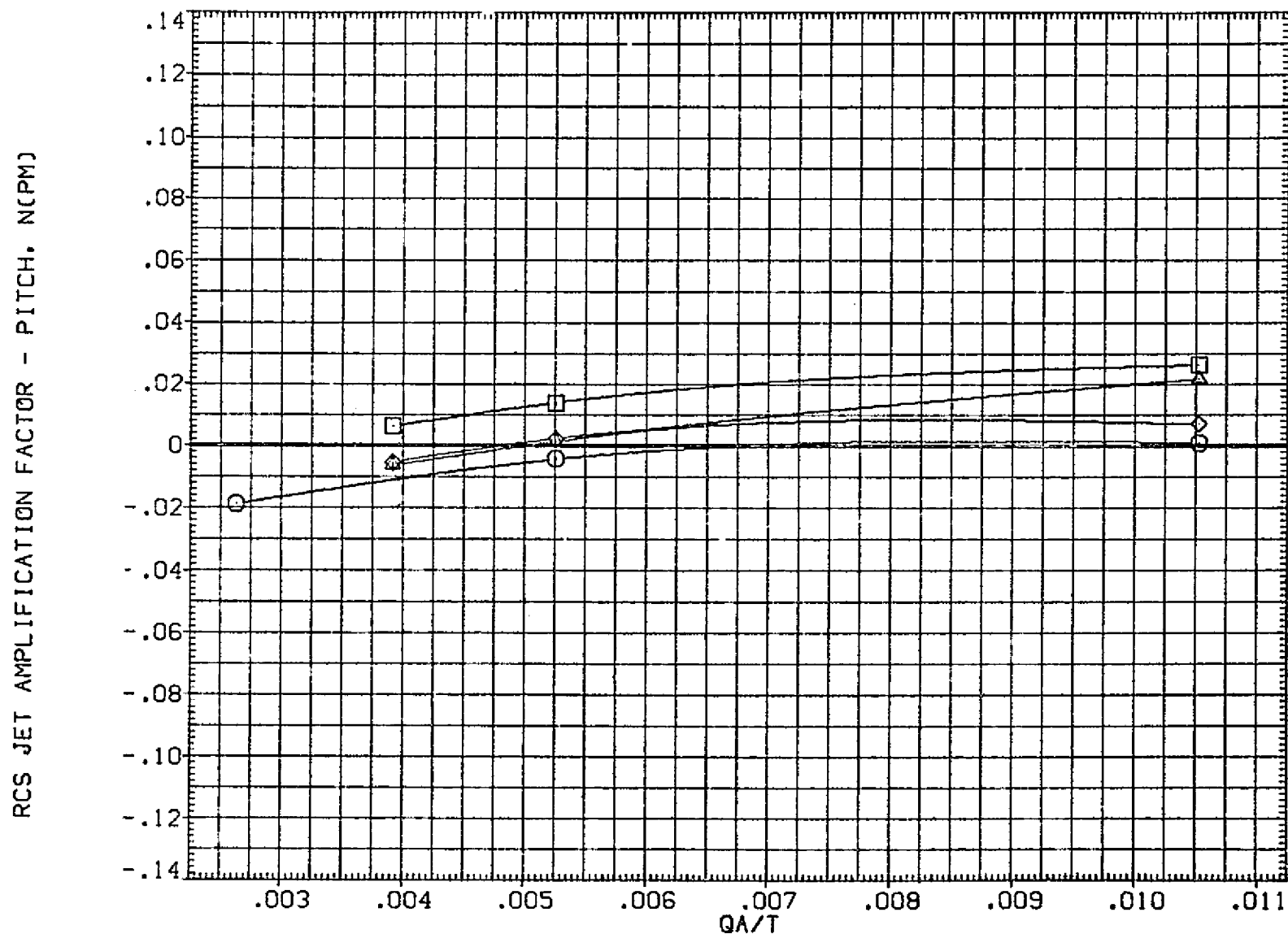


FIGURE 94. AREA RATIO EFFECTS, R/H UP FIRING JETS

(H) ALPHA = 6.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA075)	01N32 LARC CFHT 118 (MA-22)
(SJA076)	01N36 LARC CFHT 118 (MA-22)
(SJA077)	01N48 LARC CFHT 118 (MA-22)
(SJA078)	01N44 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BD FLAP	BETA	REFERENCE INFORMATION
.000	2.000	.000	.000	SREF 2690.0000 SQ. FT.
.000	2.000	.000	.000	LREF 474.8000 INCHES
.000	2.000	.000	.000	BREF 936.6800 INCHES
.000	2.000	.000	.000	XMRP 1076.7000 IN. X0
				YMRP .0000 IN. Y0
				ZMRP 375.0000 IN. Z0
				SCALE .0100

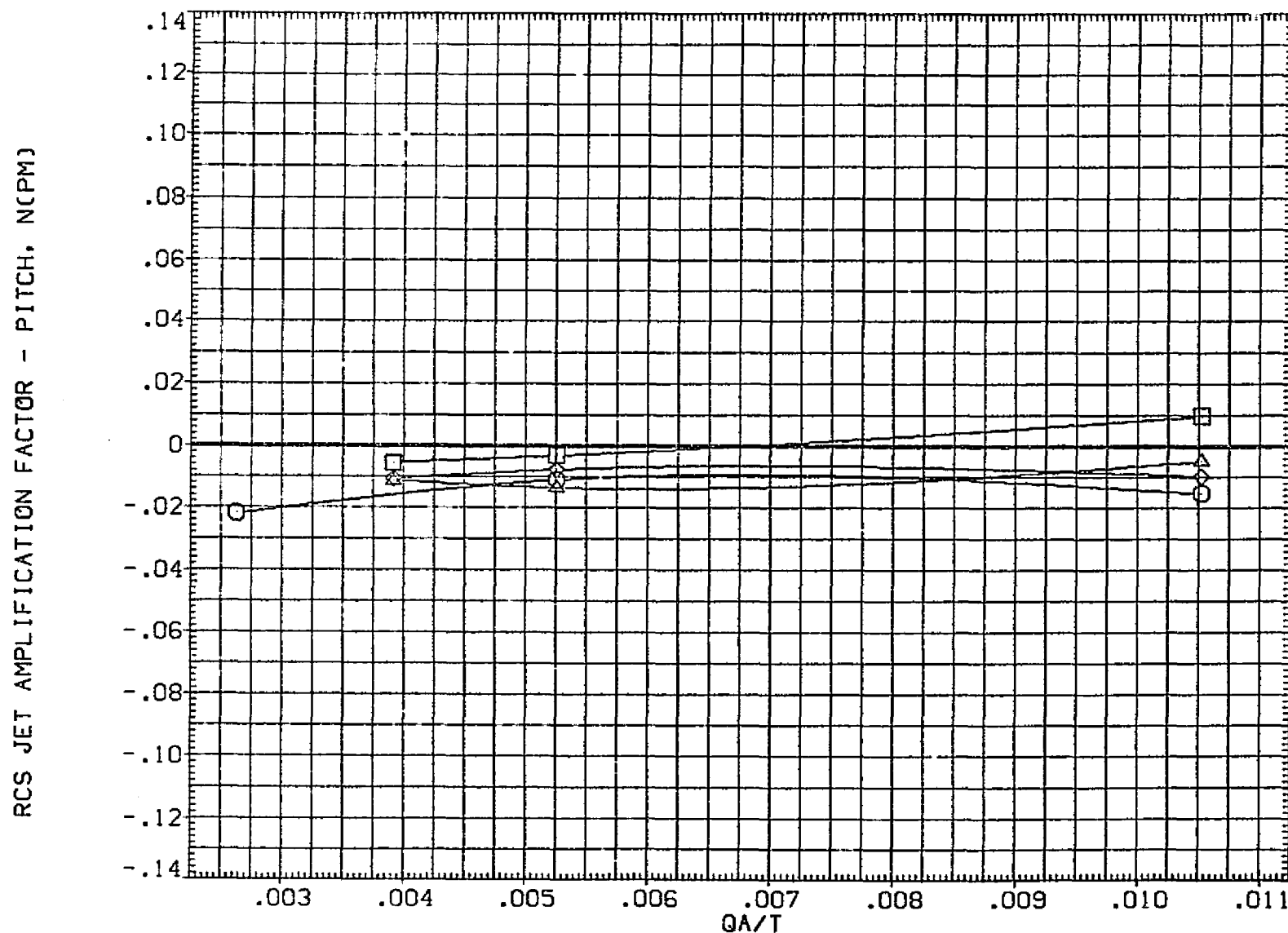


FIGURE 94. AREA RATIO EFFECTS, R/H UP FIRING JETS
(I) ALPHA = 8.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA075) □	01N32 LARC CFHT 118 (MA-22)
(SJA076) □	01N36 LARC CFHT 118 (MA-22)
(SJA077) ◇	01N48 LARC CFHT 118 (MA-22)
(SJA078) △	01N44 LARC CFHT 118 (MA-22)

ELEVON	NO.JET	BDFLAP	BETA	REFERENCE INFORMATION
.000	2.000	.000	.000	SREF 2690.0000 SQ.FT.
.000	2.000	.000	.000	LREF 474.8000 INCHES
.000	2.000	.000	.000	BREF 936.6800 INCHES
.000	2.000	.000	.000	XMRP 1076.7000 IN. X0
				YMRP .0000 IN. Y0
				ZMRP 375.0000 IN. Z0
				SCALE .0100

RCS JET AMPLIFICATION FACTOR - PITCH, N(PM)

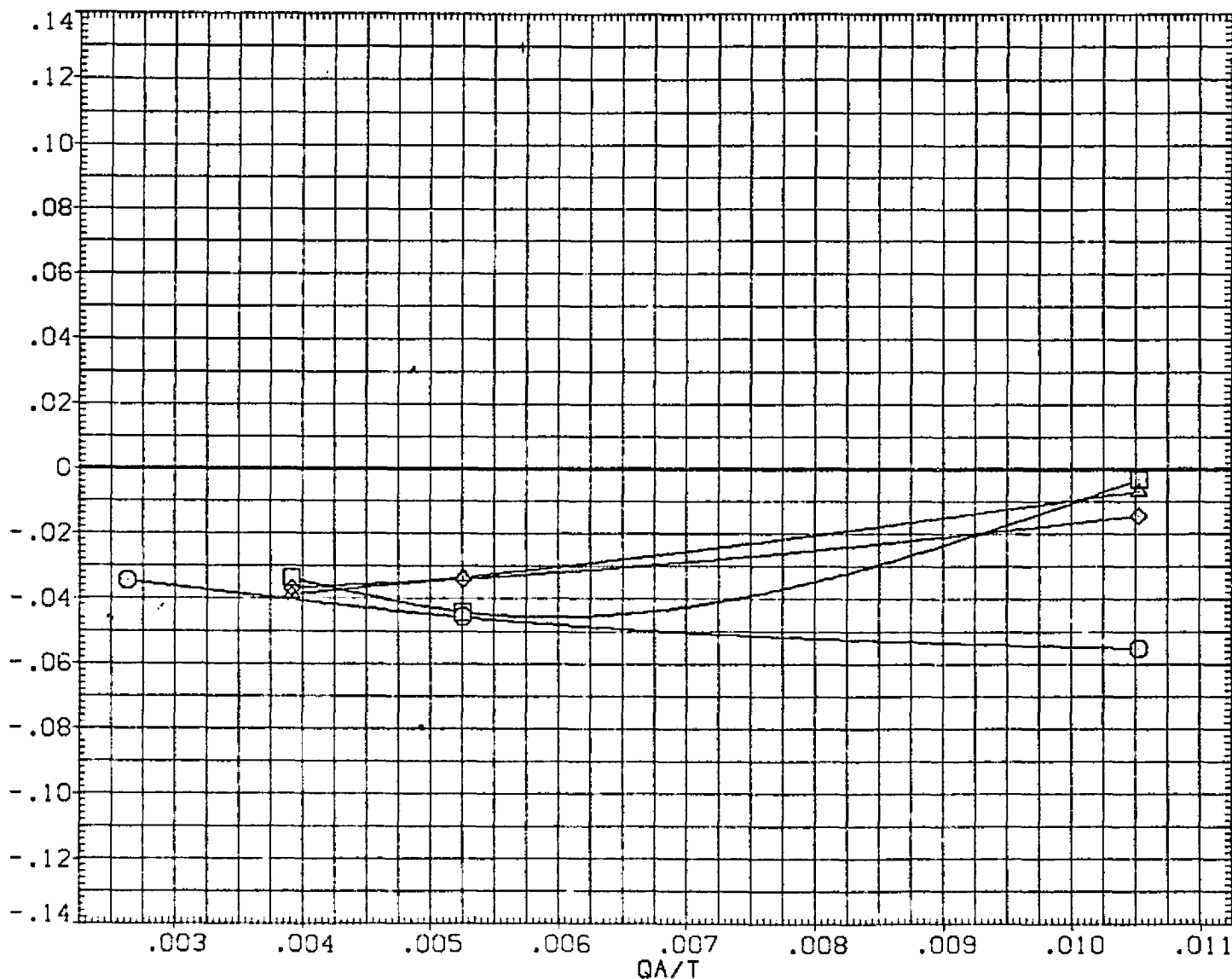


FIGURE 94. AREA RATIO EFFECTS, R/H UP FIRING JETS
(J)ALPHA = 10.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA075) ○	01N32 LARC CFHT 116 (MA-22)
(SJA076) □	01N36 LARC CFHT 118 (MA-22)
(SJA077) △	01N48 LARC CFHT 118 (MA-22)
(SJA078) ◇	01N44 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BDFLAP	BETA	REFERENCE INFORMATION
.000	2.000	.000	.000	SREF 2690.0000 SQ. FT.
.000	2.000	.000	.000	LREF 474.8000 INCHES
.000	2.000	.000	.000	BREF 936.6800 INCHES
.000	2.000	.000	.000	XMRF 1076.7000 IN. X0
				YMRF .0000 IN. Y0
				ZMRF .0000 IN. Z0
				SCALE .0100

RCS JET AMPLIFICATION FACTOR - PITCH, NCPM)

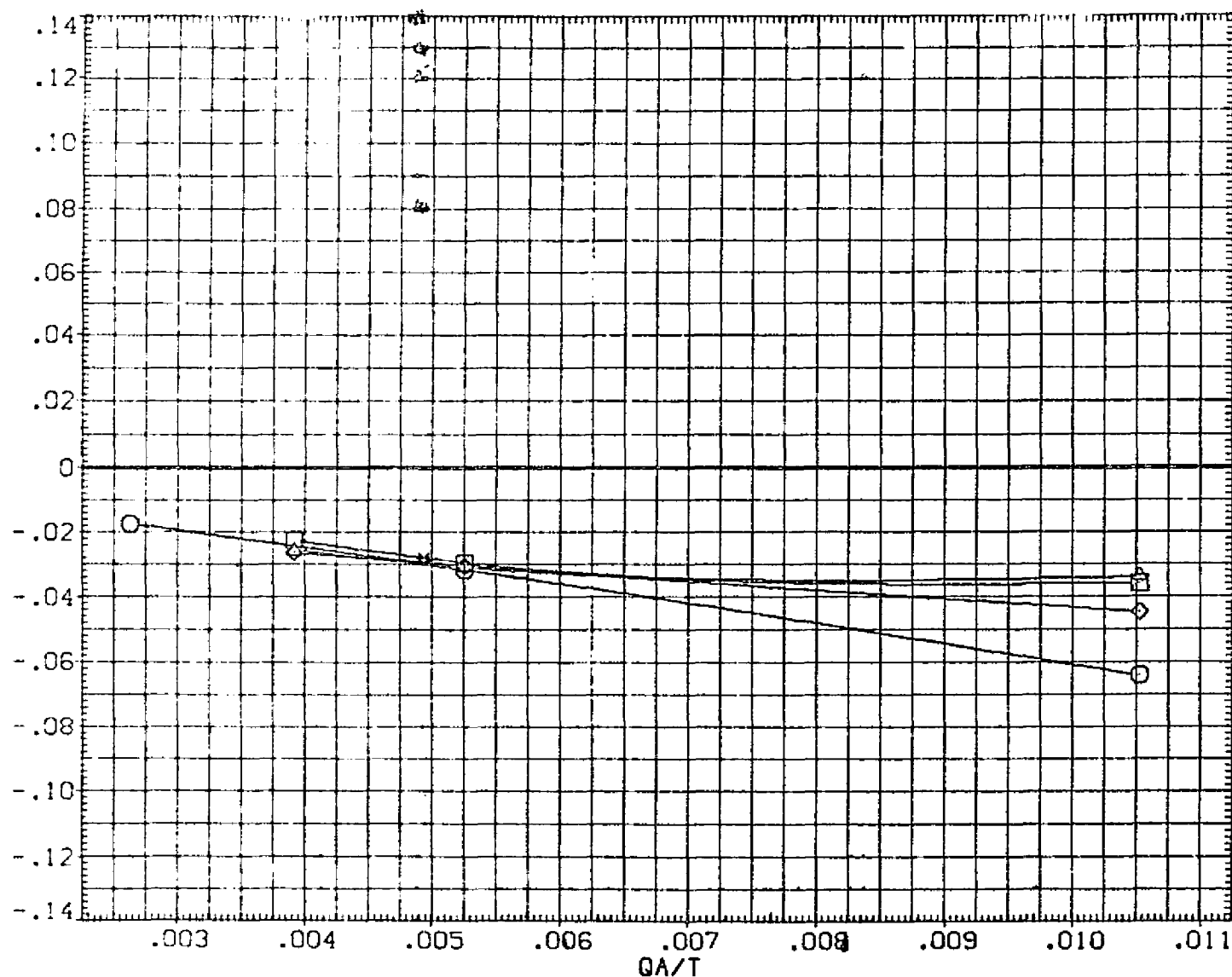


FIGURE 94. AREA RATIO EFFECTS, R/H UP FIRING JETS

(K) ALPHA = 15.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	NO. JET	BD FLAP	BETA	REFERENCE INFORMATION	
(SJA075)	01N32 LARC CFHT 118 (MA-22)	.000	2.000	.000	.000	SREF	2690.0000 SQ. FT.
(SJA076)	01N36 LARC CFHT 118 (MA-22)	.000	2.000	.000	.000	LREF	474.8000 INCHES
(SJA077)	01N48 LARC CFHT 118 (MA-22)	.000	2.000	.000	.000	BREF	936.6800 INCHES
(SJA078)	01N44 LARC CFHT 118 (MA-22)	.000	2.000	.000	.000	XMRP	1076.7000 IN. XO
						YMRP	.0000 IN. YO
						ZMRP	375.0000 IN. ZO
						SCALE	.0100

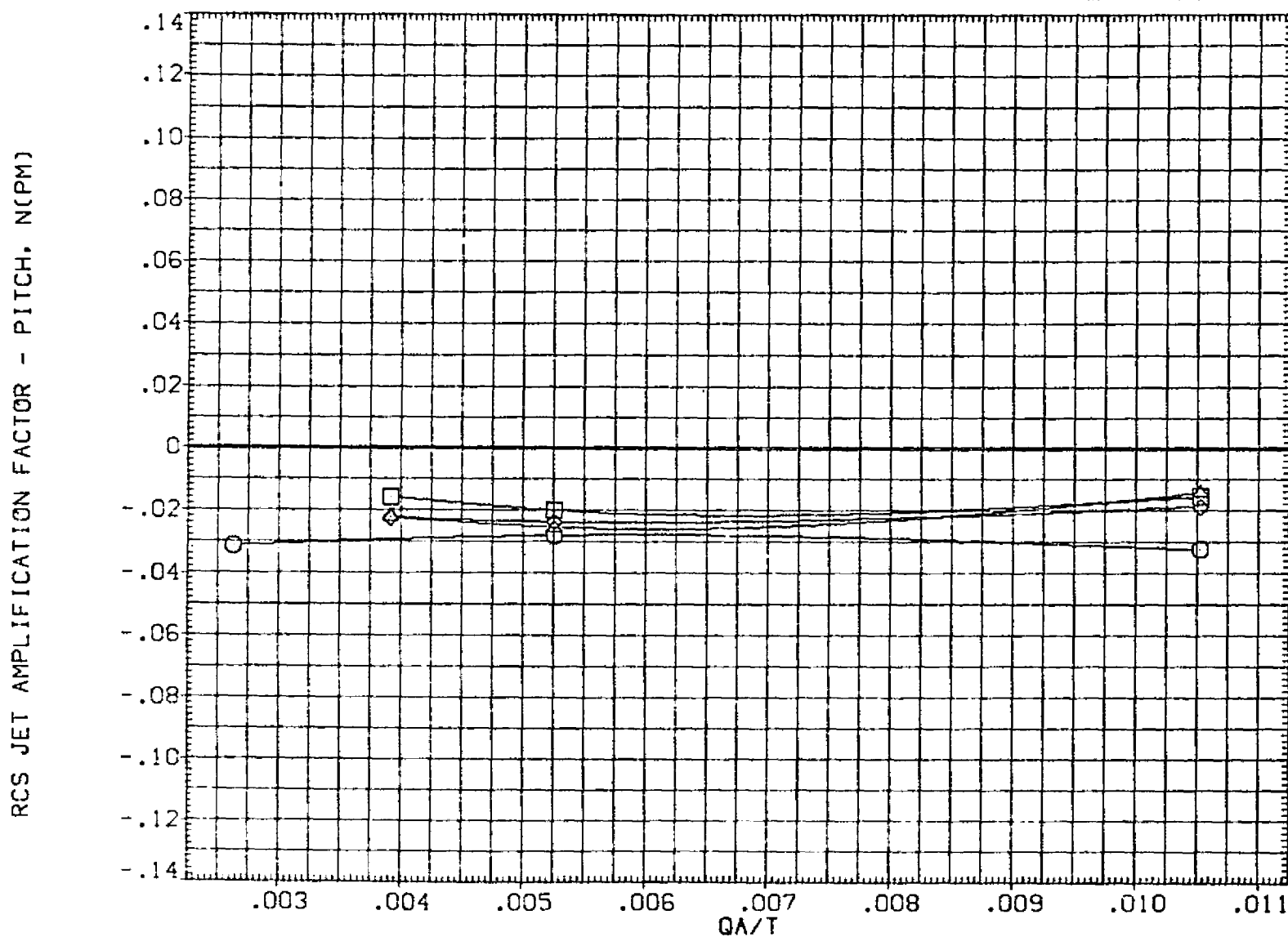


FIGURE 94. AREA RATIO EFFECTS, R/H UP FIRING JETS
(L) ALPHA = 20.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA075) □	01N32 LARC CFHT 118 (MA-22)
(SJA076) □	01N36 LARC CFHT 118 (MA-22)
(SJA077) ◇	01N48 LARC CFHT 118 (MA-22)
(SJA078) △	01N44 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BOFLAP	BETA	REFERENCE INFORMATION		
.000	2.000	.000	.000	SREF	2690.0000	SQ. FT.
.000	2.000	.000	.000	LREF	474.8000	INCHES
.000	2.000	.000	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - PITCH, N(PM)

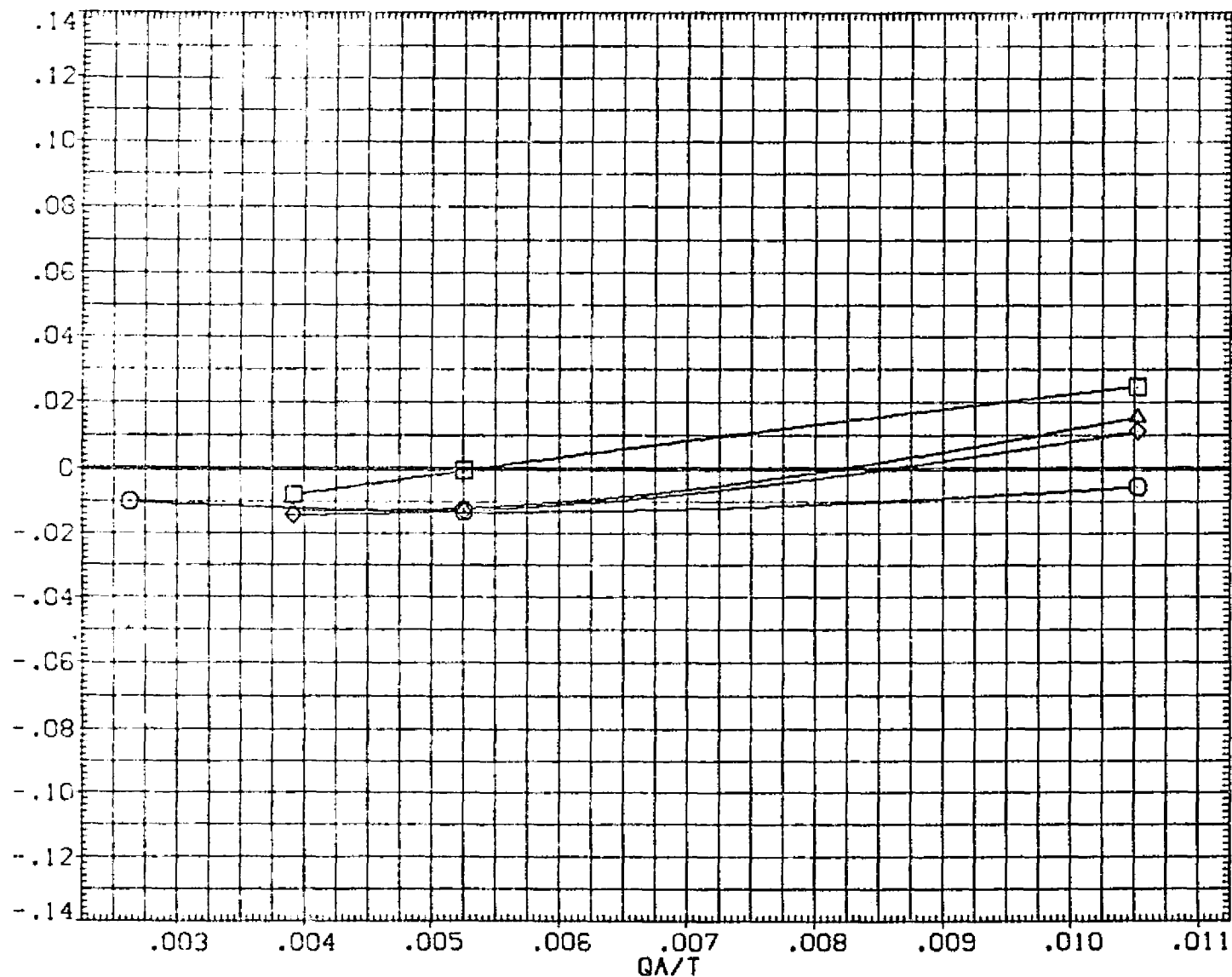


FIGURE 94. AREA RATIO EFFECTS, R/H UP FIRING JETS

(M)ALPHA = 25.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA075) □	01N32 LARC CFHT 118 (MA-22)
(SJA076) □	01N36 LARC CFHT 118 (MA-22)
(SJA077) ◇	01N48 LARC CFHT 118 (MA-22)
(SJA078) △	01N44 LAPC CFHT 118 (MA-22)

ELEVON	NO. JET	BD FLAP	BETA	REFERENCE INFORMATION		
.000	2.000	.000	.000	SREF	2690.0000	SQ. FT.
.000	2.000	.000	.000	LREF	474.8000	INCHES
.000	2.000	.000	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - PITCH, N(PM)

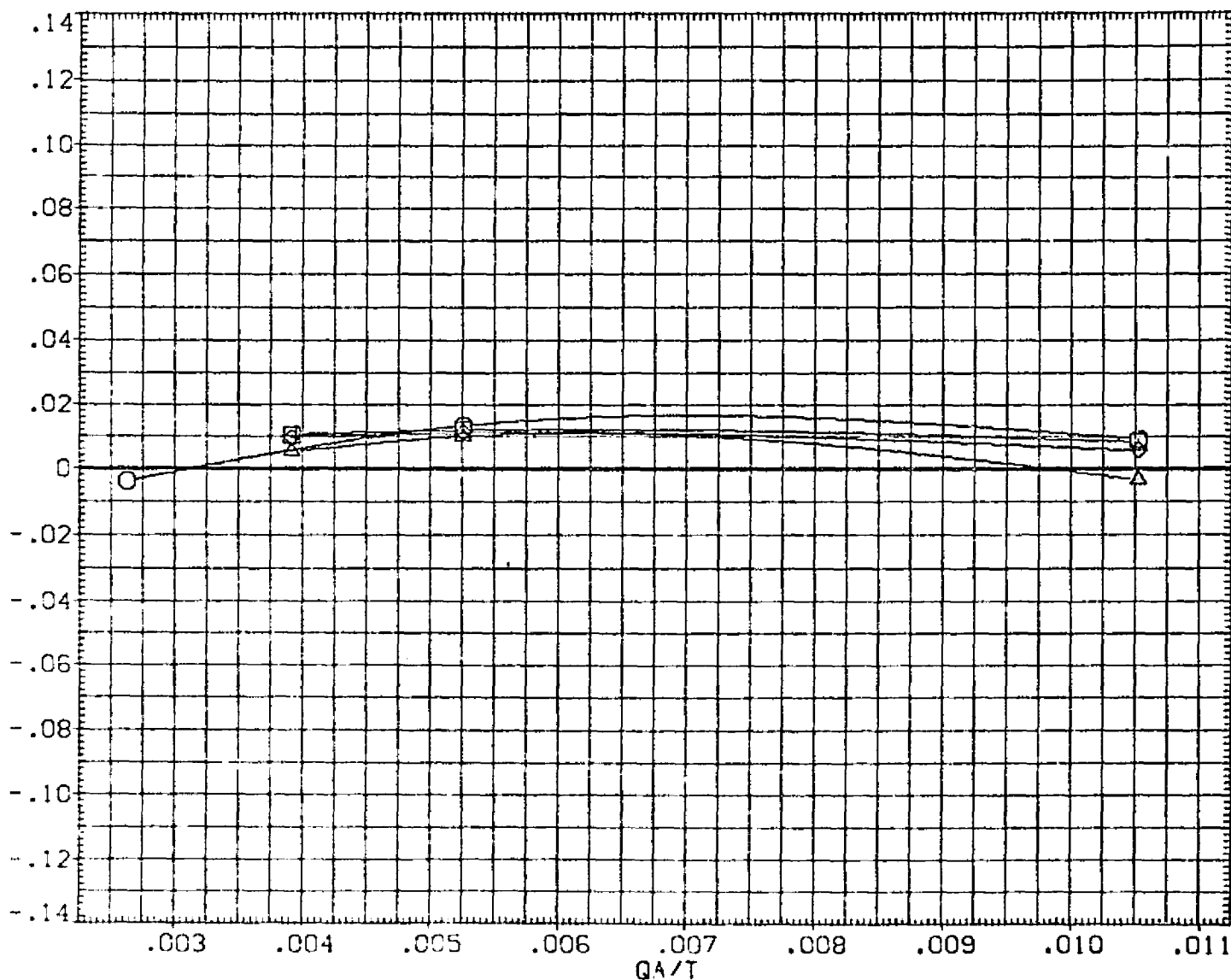


FIGURE 94. AREA RATIO EFFECTS, R/H UP FIRING JETS

(N) ALPHA = 30.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA075)	01N32 LARC CFHT 118 (MA-22)
(SJA076)	01N36 LARC CFHT 118 (MA-22)
(SJA077)	01N48 LARC CFHT 118 (MA-22)
(SJA078)	01N44 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BOFLAP	BETA	REFERENCE INFORMATION
.000	2.000	.000	.000	SREF 2640.0000 SQ. FT.
.000	2.000	.000	.000	LREF 474.8000 INCHES
.000	2.000	.000	.000	BREF 936.6800 INCHES
.000	2.000	.000	.000	XMRF 1076.7000 IN. X0
				YMRP .0000 IN. Y0
				ZMRP 375.0000 IN. Z0
				SCALE .0100

RCS JET AMPLIFICATION FACTOR - PITCH, N(PM)

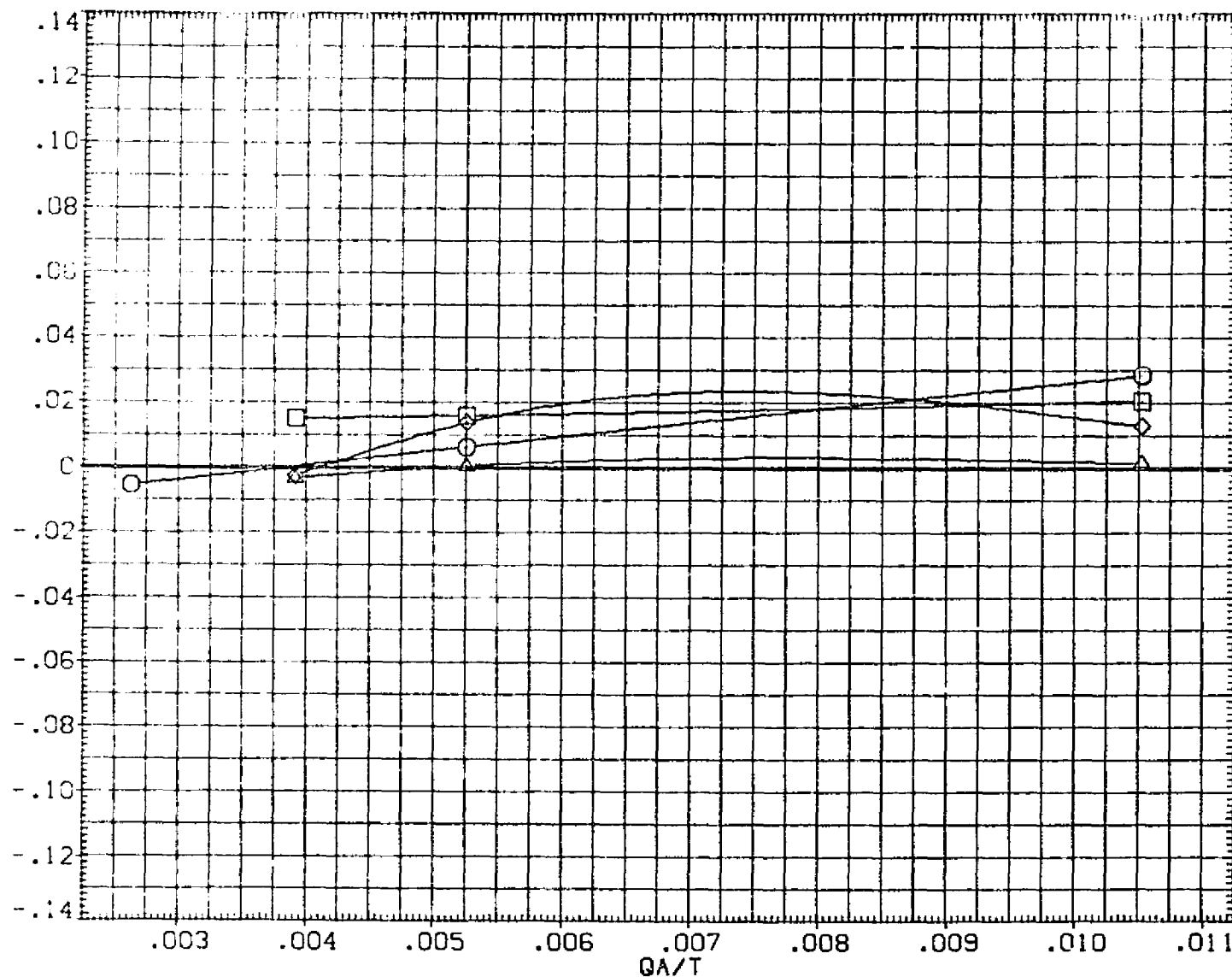


FIGURE 94. AREA RATIO EFFECTS, R/L UP FIRING JETS

(C) ALPHA = 35.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA075)	Q1N32 LARC CFHT 118 (MA-22)
(SJA076)	Q1N36 LARC CFHT 118 (MA-22)
(SJA077)	Q1N48 LARC CFHT 118 (MA-22)
(SJA078)	Q1N44 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BD FLAP	BETA	REFERENCE INFORMATION
.000	2.000	.000	.000	SREF 2690.0000 SQ. FT.
.000	2.000	.000	.000	LREF 474.8000 INCHES
.000	2.000	.000	.000	BREF 936.6800 INCHES
.000	2.000	.000	.000	XMRP 1076.7000 IN. X0
				YMRP .0000 IN. Y0
				ZMRP 375.0000 IN. Z0
				SCALE .0100

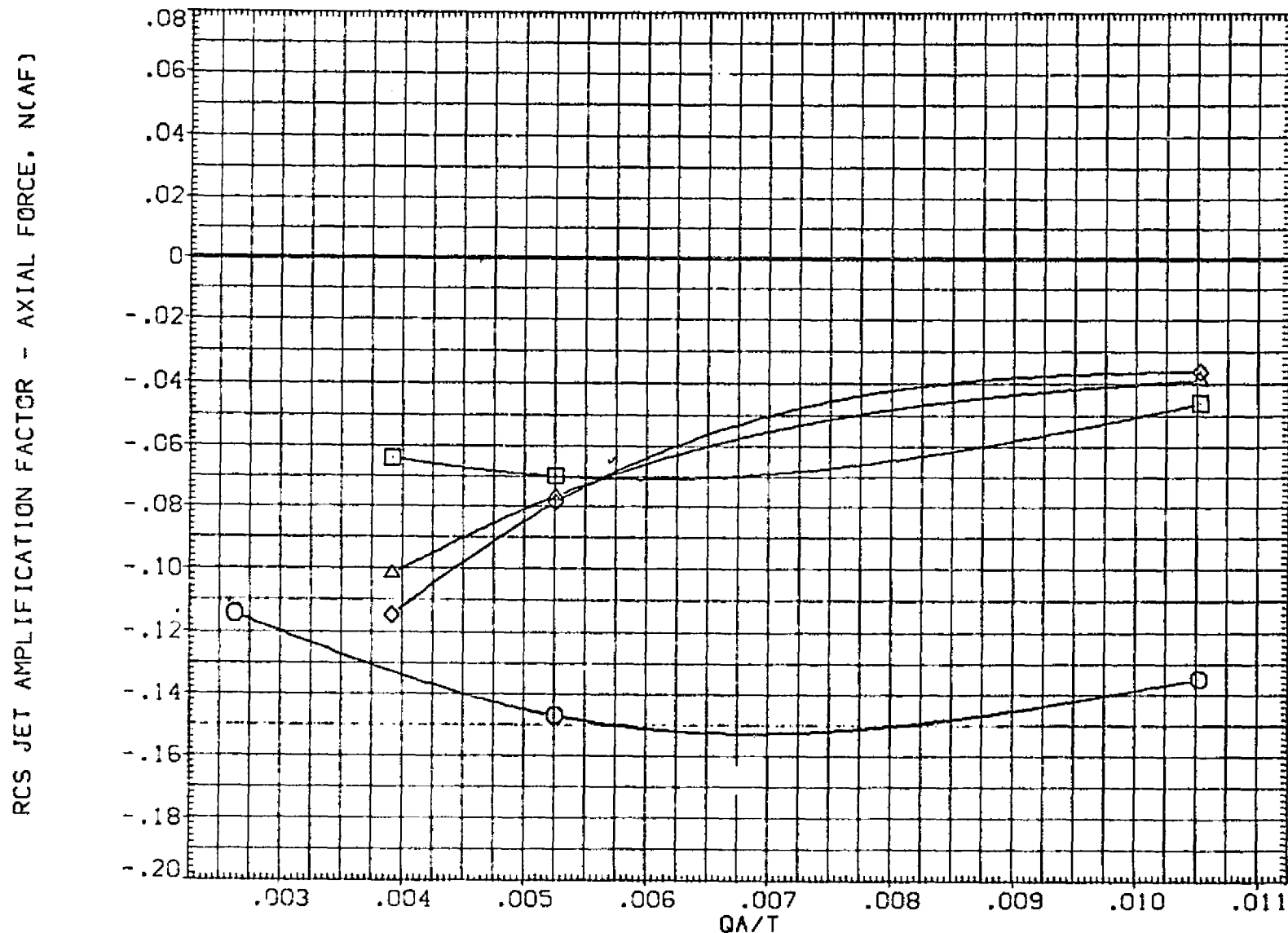


FIGURE 94. AREA RATIO EFFECTS, R/H UP FIRING JETS
(A) ALPHA = -8.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA075)	01N32 LARC CFHT 118 (MA-22)
(SJA076)	01N36 LARC CFHT 118 (MA-22)
(SJA077)	01N46 LARC CFHT 118 (MA-22)
(SJA078)	01N44 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BD FLAP	BETA	REFERENCE INFORMATION		
.000	2.000	.000	.000	SREF	2690.0000	50. FT.
.000	2.000	.000	.000	LREF	474.8000	INCHES
.000	2.000	.000	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.0100	

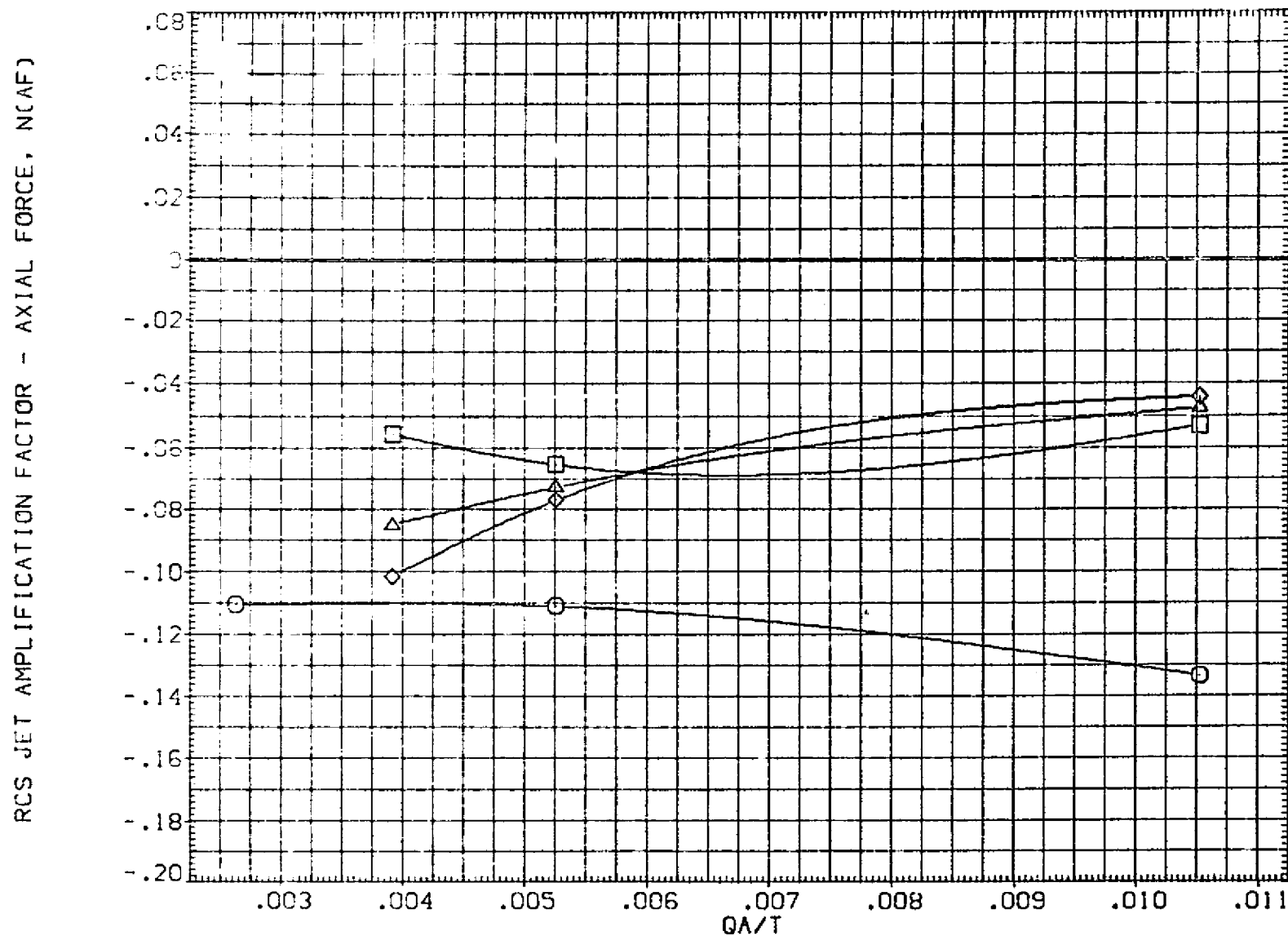


FIGURE 94. AREA RATIO EFFECTS, R/H UP FIRING JETS

(B) ALPHA = -6.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA075) ○	01N32 LARC CFHT 118 (MA-22)
(SJA076) □	01N36 LARC CFHT 118 (MA-22)
(SJA077) ◇	01N48 LARC CFHT 118 (MA-22)
(SJA078) △	01N44 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BD FLAP	BETA	REFERENCE INFORMATION		
.000	2.000	.000	.000	SREF	2690.0000	50. FT.
.000	2.000	.000	.000	LREF	474.8000	INCHES
.000	2.000	.000	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - AXIAL FORCE, N(AF)

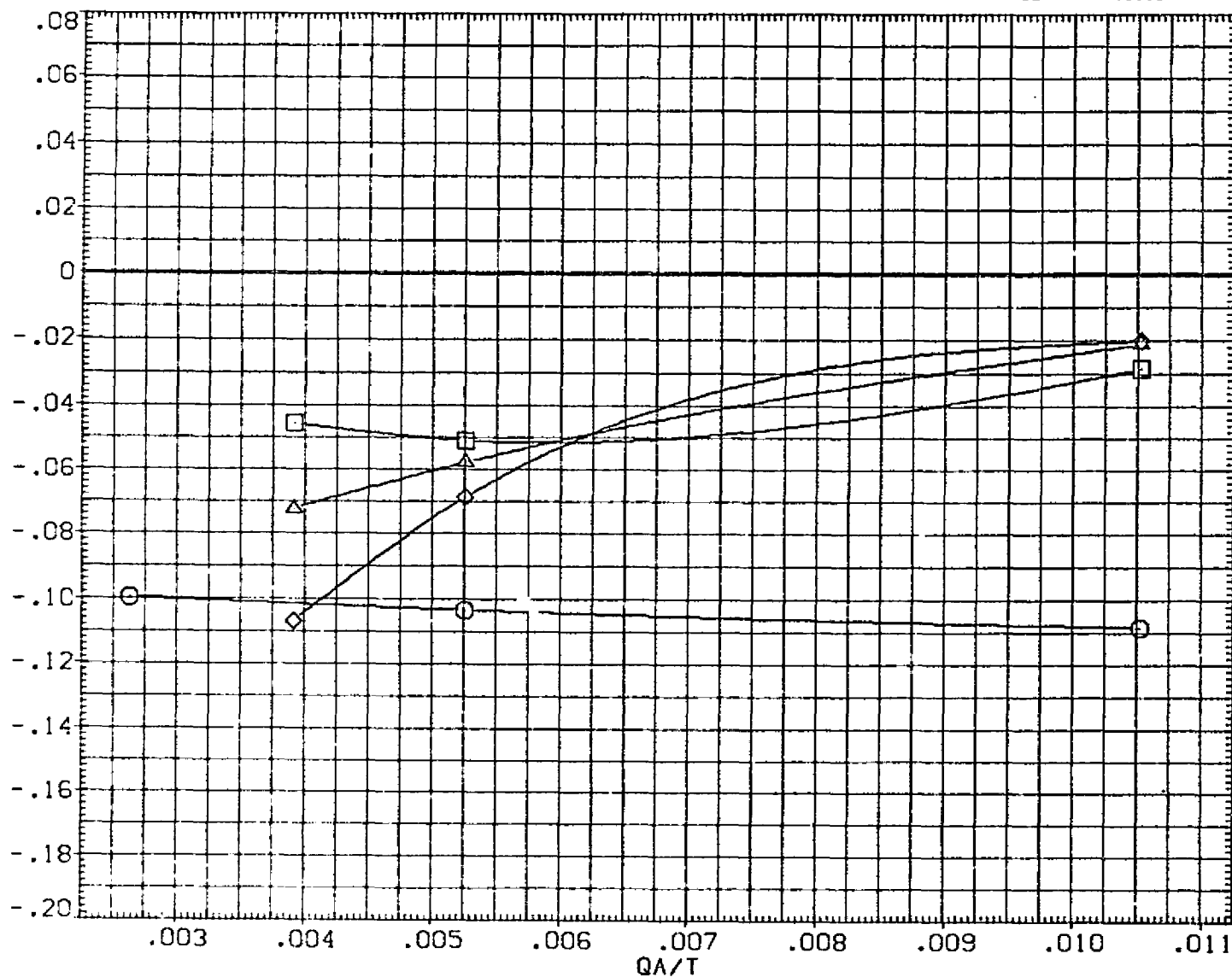


FIGURE 94. AREA RATIO EFFECTS, R/H UP FIRING JETS

(C) ALPHA = -4.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	NO. JET	BD FLAP	BETA	REFERENCE INFORMATION		
(SJA075)	01N32 LARC CFHT 118 (MA-22)	.000	2.000	.000	.000	SREF	2690.0000	SQ. FT.
(SJA076)	01N36 LARC CFHT 118 (MA-22)	.000	2.000	.000	.000	LREF	474.8000	INCHES
(SJA077)	01N48 LARC CFHT 118 (MA-22)	.000	2.000	.000	.000	BREF	936.6800	INCHES
(SJA078)	01N44 LARC CFHT 118 (MA-22)	.000	2.000	.000	.000	XMPP	1056.7000	IN. X0
						YMRP	.0000	IN. Y0
						ZMRP	3/5.0000	IN. Z0
						SCALE	.0100	

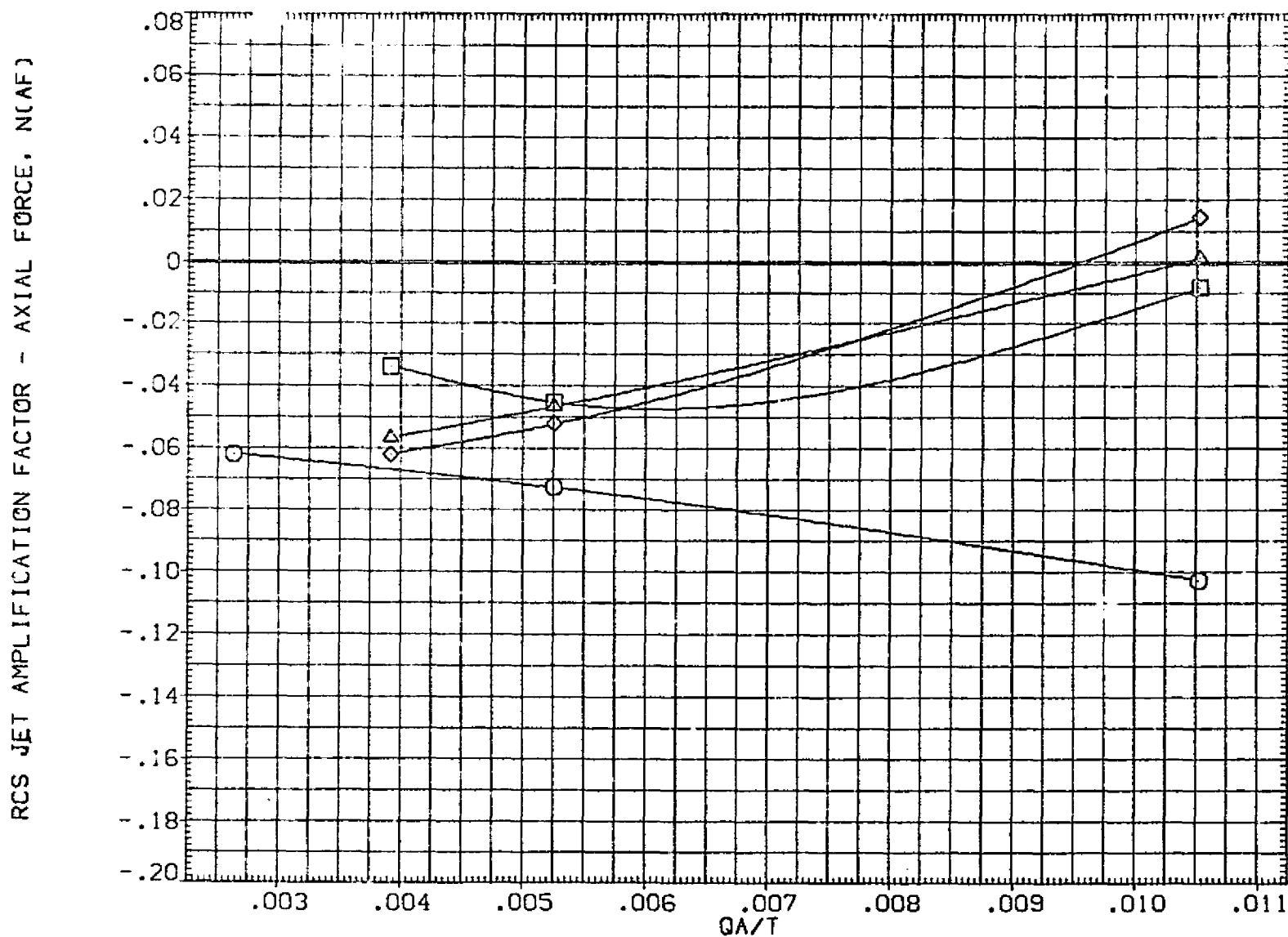


FIGURE 94. AREA RATIO EFFECTS, R/H UP FIRING JETS

(D) ALPHA = -2.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA075) □	01N32 LARC CFHT 118 (MA-22)
(SJA076) □	01N36 LARC CFHT 118 (MA-22)
(SJA077) ◇	01N48 LARC CFHT 118 (MA-22)
(SJA078) △	01N44 LARC CFHT 118 (MA-22)

ELEVON	NO.JET	BDFLAP	BETA	REFERENCE INFORMATION		
.000	2.000	.000	.000	SREF	2690.0000	SQ.FT.
.000	2.000	.000	.000	LREF	474.8000	INCHES
.000	2.000	.000	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.0100	

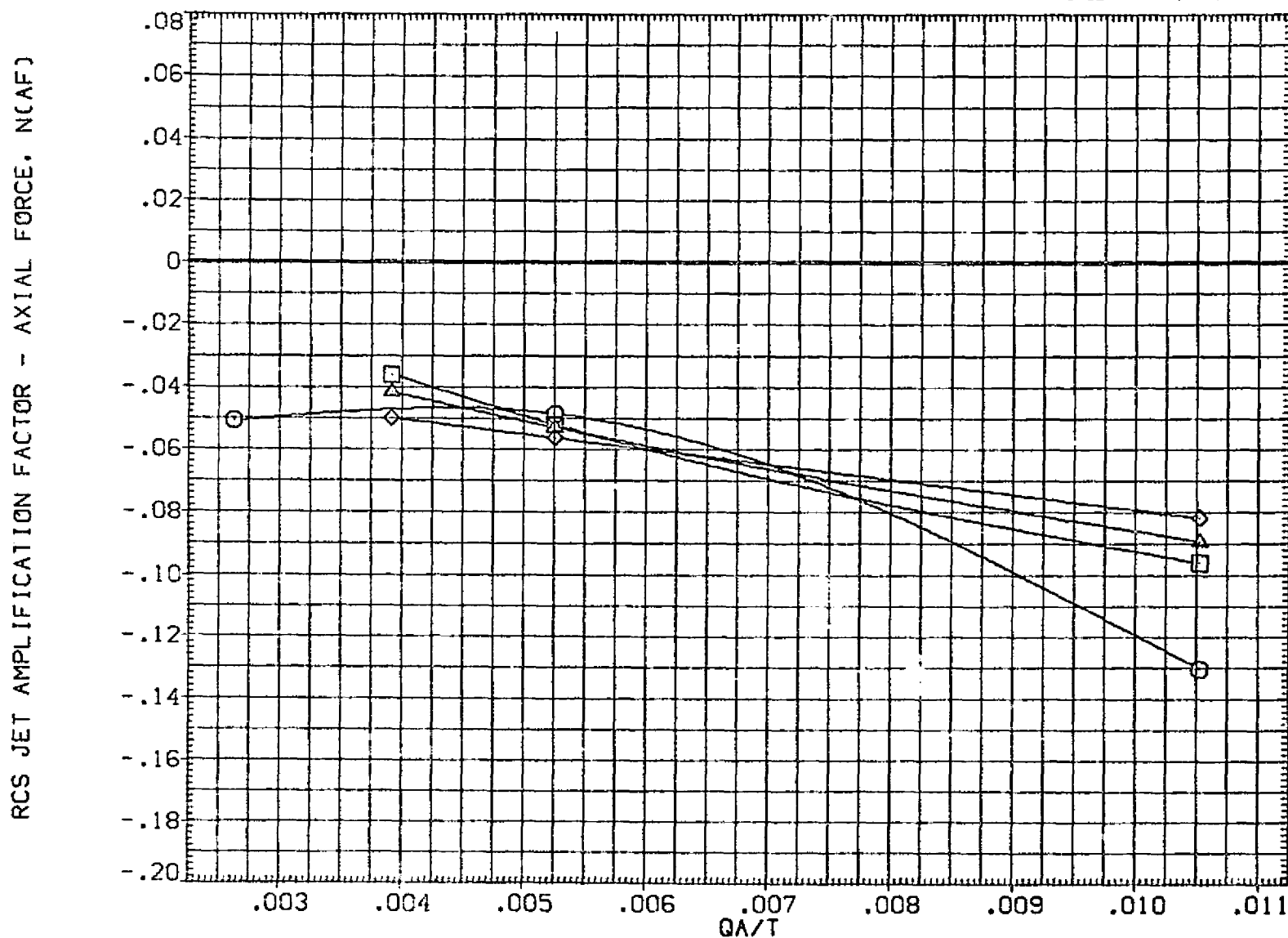


FIGURE 94. AREA RATIO EFFECTS, R/H UP FIRING JETS

(E) ALPHA = .00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	NO. JET	BOFLAP	BETA	REFERENCE INFORMATION	
(50A075)	01A32 LARC CFHT 118 (MA-22)	.000	2.000	.000	.000	SREF	2690.0000 SQ. FT.
(50A076)	01A36 LARC CFHT 118 (MA-22)	.000	2.000	.000	.000	LREF	474.8000 INCHES
(50A077)	01A48 LARC CFHT 118 (MA-22)	.000	2.000	.000	.000	BREF	935.6800 INCHES
(50A078)	01A44 LARC CFHT 118 (MA-22)	.000	2.000	.000	.000	XMAP	1035.7000 IN. X0
						YMAP	.0000 IN. Y0
						ZMAP	375.0000 IN. Z0
						SCALE	.0100

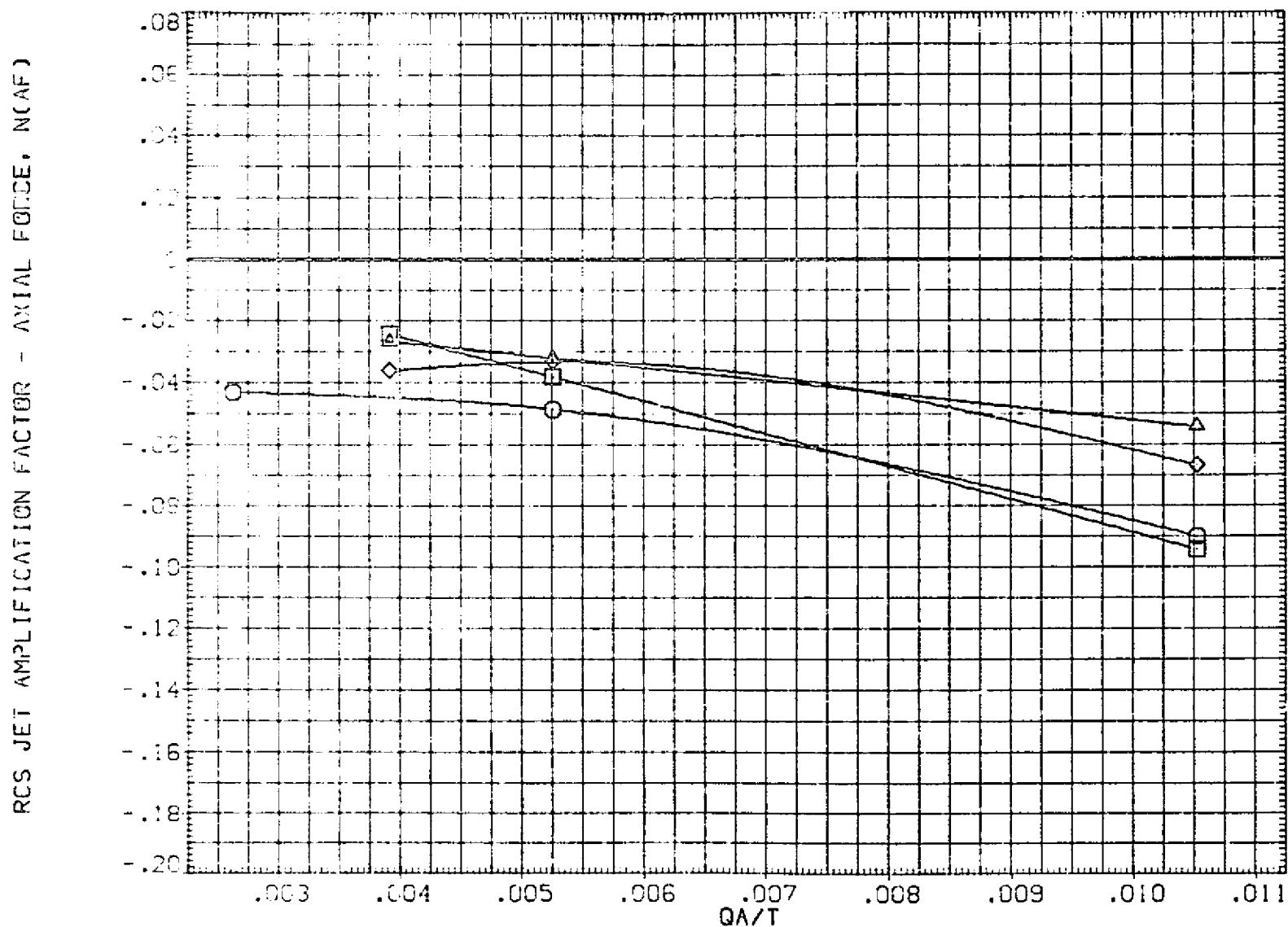


FIGURE 94. AREA RATIO EFFECTS, R/H UP FIRING JETS

(F) ALPHA = 2.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	NO. JET	BOFLAP	BETA	REFERENCE INFORMATION		
(SJA075)	01N32 LARC CFHT 118 (MA-22)	.000	2.000	.000	.000	SREF	2650.0000	50. FT.
(SJA076)	01N36 LARC CFHT 118 (MA-22)	.000	2.000	.000	.000	LREF	474.8000	INCHES
(SJA077)	01N48 LARC CFHT 118 (MA-22)	.000	2.000	.000	.000	BREF	936.8800	INCHES
(SJA078)	01N44 LARC CFHT 118 (MA-22)	.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
						YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0100	

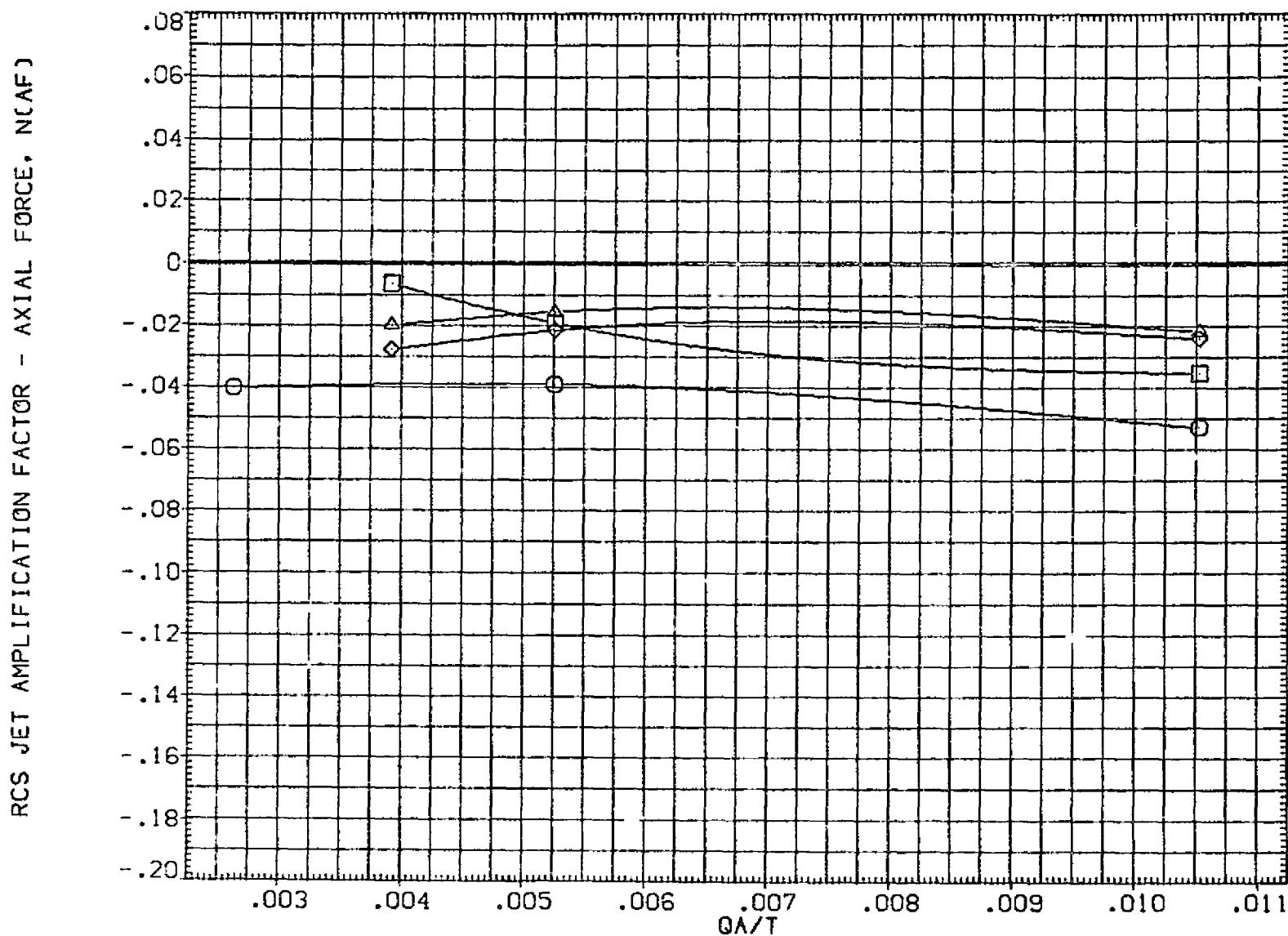


FIGURE 94. AREA RATIO EFFECTS, R/H UP FIRING JETS

(G) ALPHA = 4.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA075)	01N32 LARC CFHT 118 (MA-22)
(SJA076)	01N36 LARC CFHT 118 (MA-22)
(SJA077)	01N19 LARC CFHT 118 (MA-22)
(SJA078)	01N44 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BD FLAP	BETA	REFERENCE INFORMATION		
.000	2.000	.000	.000	SREF	2690.0000	SQ. FT.
.000	2.000	.000	.000	LREF	474.8000	IN. CHES
.000	2.000	.000	.000	BREF	936.6800	IN. CHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - AXIAL FORCE, N(AF)

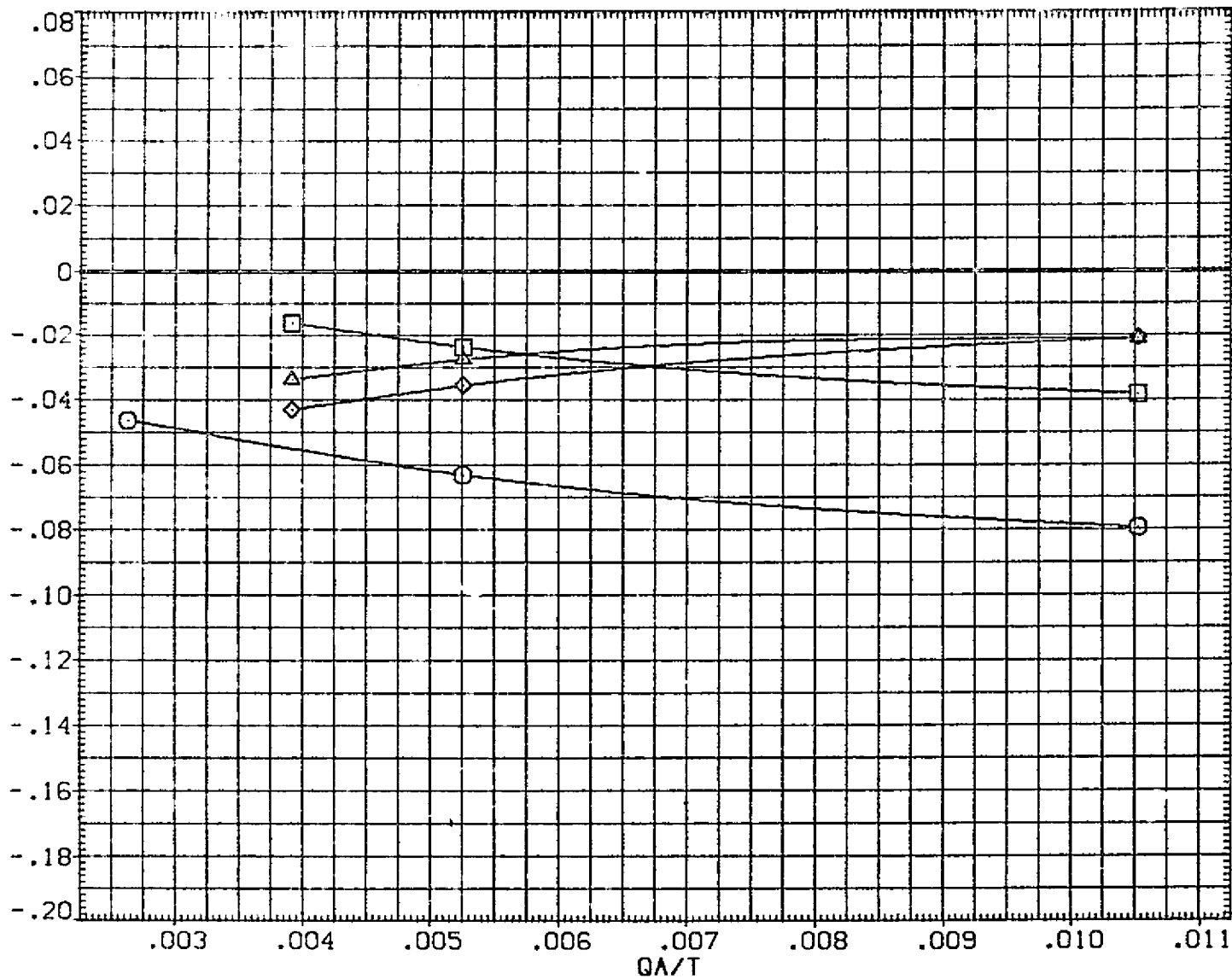


FIGURE 94. AREA RATIO EFFECTS, R/H UP FIRING JETS
(H)ALPHA = 6.00

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION
(SJA075)	○	01N32 LARC CFHT 118 (MA-22)
(SJA076)	□	01N36 LARC CFHT 118 (MA-22)
(SJA077)	△	01N48 LARC CFHT 118 (MA-22)
(SJA078)	◇	01N44 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BO FLAP	BETA	REFERENCE INFORMATION		
.000	2.000	.000	.000	SREF	2690.0000	SQ. FT.
.000	2.000	.000	.000	LREF	474.8000	INCHES
.000	2.000	.000	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - AXIAL FORCE, N(AF)

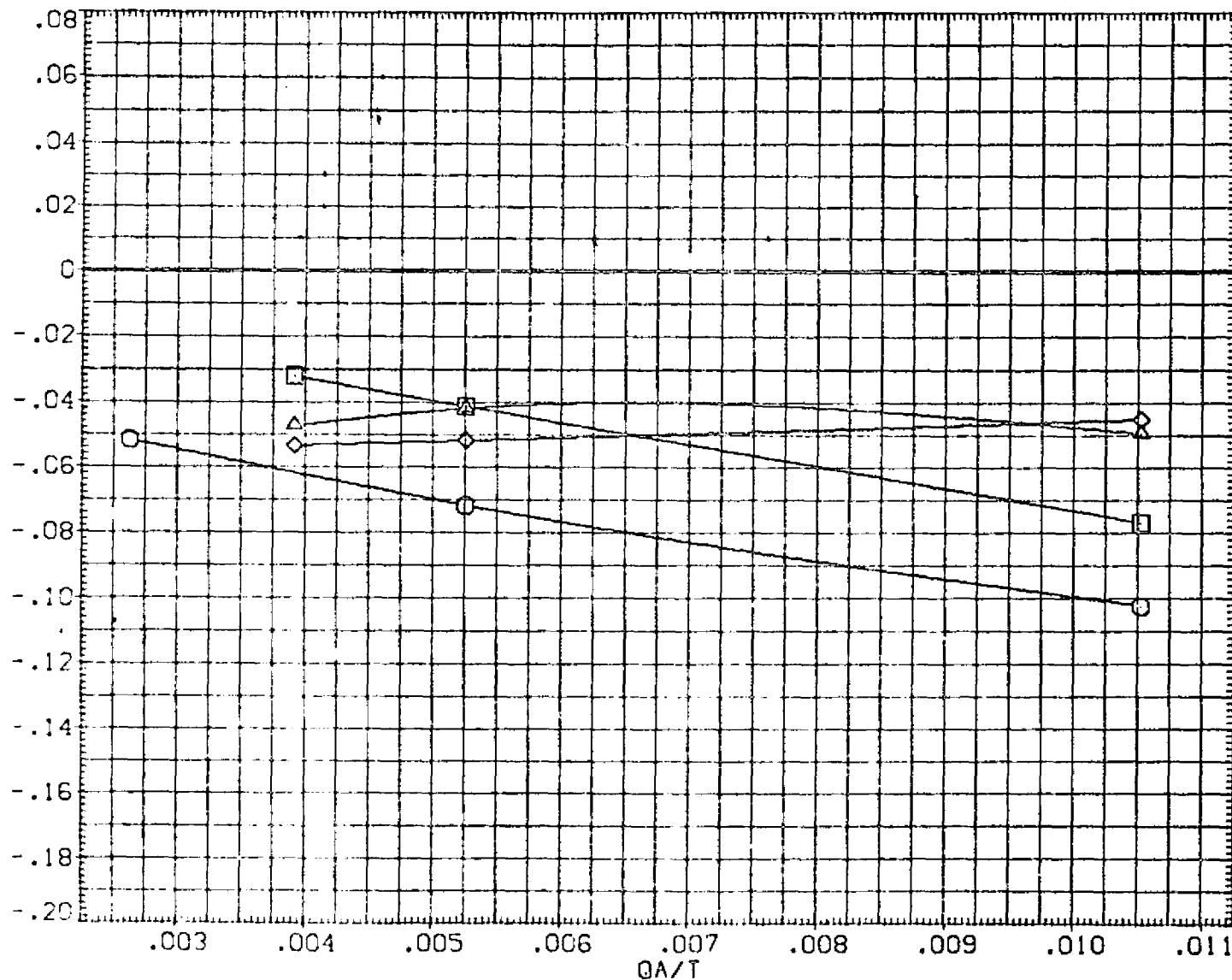


FIGURE 94. AREA RATIO EFFECTS, R/H UP FIRING JETS

(1) ALPHA = 8.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(S)A075)	QIN42 L WING LFHT 118 (MA-22)
(S)A076)	QIN36 L WING LFHT 118 (MA-22)
(S)A077)	QIN44 L WING LFHT 118 (MA-22)
(S)A078)	QIN44 L WING LFHT 118 (MA-22)

ELEVON	NO JET	UDFLAP	BETA	REFERENCE INFORMATION
.000	2.000	.000	.000	SREF 2890.0000 SQ. FT.
.000	2.000	.000	.000	LREF 44.8000 INCHES
.000	2.000	.000	.000	BREF 36.6800 INCHES
.000	2.000	.000	.000	XREF 126.7000 IN. X0
				YREF .0000 IN. Y0
				ZREF 375.0000 IN. Z0
				SCALE .0100

RCS JET AMPLIFICATION FACTOR - AXIAL FORCE, N(AF)

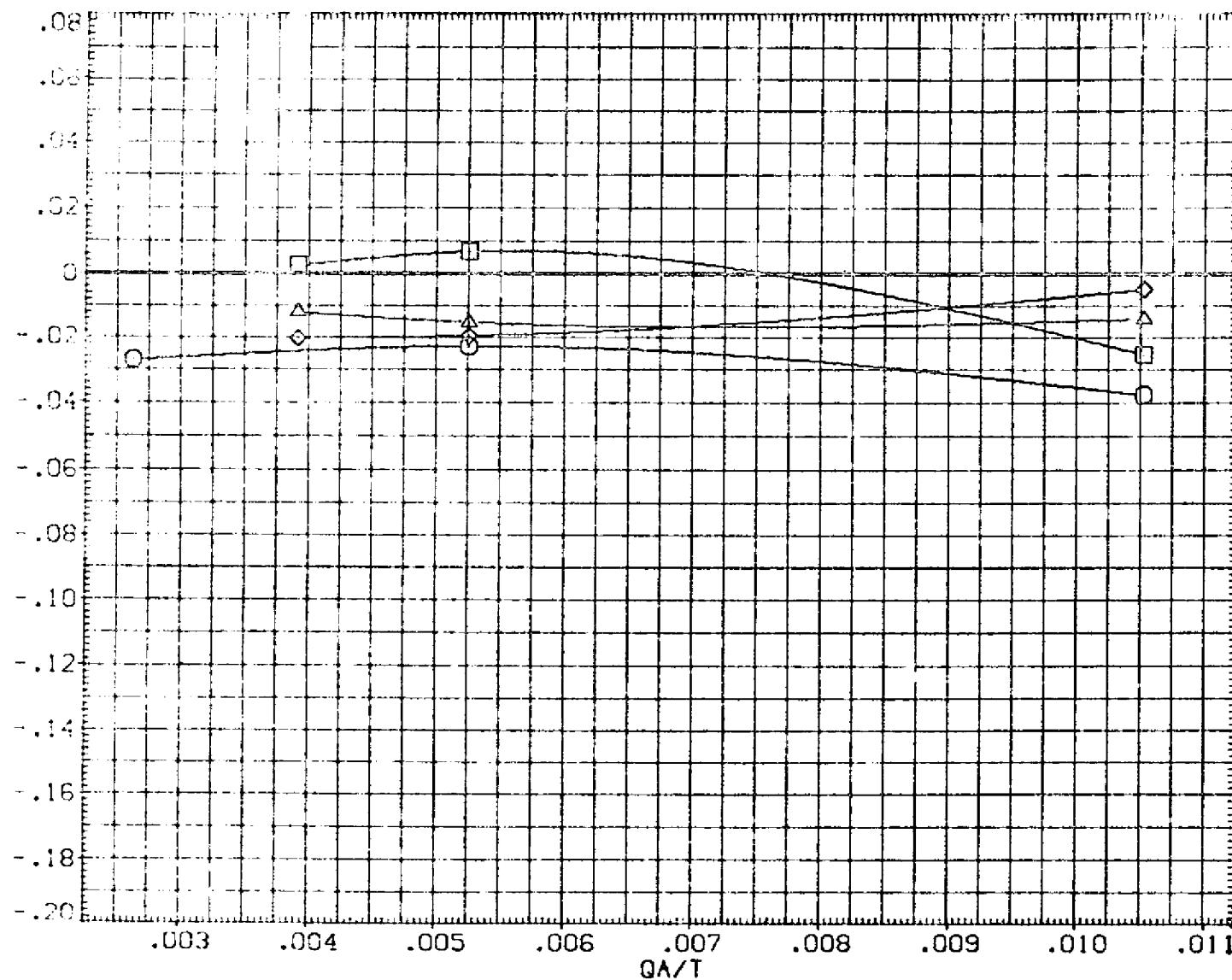


FIGURE 94. AREA RATIO EFFECTS, R/H UP FIRING JETS

(J) ALPHA = 10.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA075)	01N32 LARC CFHT 118 (MA-22)
(SJA076)	01N36 LARC CFHT 118 (MA-22)
(SJA077)	01N48 LARC CFHT 118 (MA-22)
(SJA078)	01N44 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BD FLAP	BETA	REFERENCE INFORMATION	
.000	2.000	.000	.000	SREF	2690.0000 SQ. FT.
.000	2.000	.000	.000	LREF	474.8000 INCHES
.000	2.000	.000	.000	BREF	936.6800 INCHES
.000	2.000	.000	.000	XMRP	1076.7000 IN. X0
				YMRP	.0030 IN. Y0
				ZMRP	375.0000 IN. Z0
				SCALE	.0100

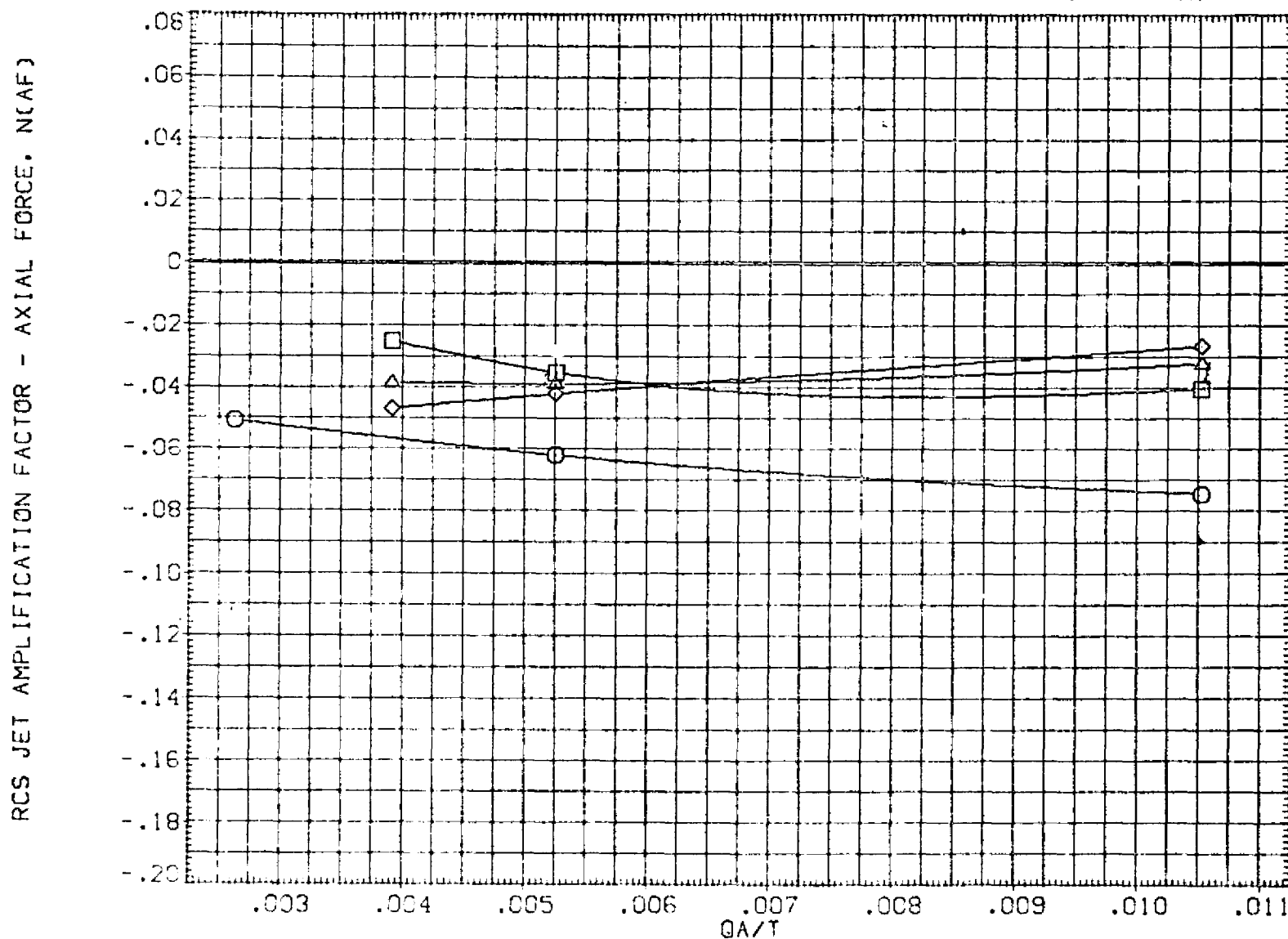


FIGURE 94. AREA RATIO EFFECTS, R/H UP FIRING JETS

(K) ALPHA = 15.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA075)	01N32 LARC CFHT 118 (MA-22)
(SJA076)	01N36 LARC CFHT 118 (MA-22)
(SJA077)	01N49 LARC CFHT 118 (MA-22)
(SJA078)	01N44 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BOFLAP	BETA	REFERENCE INFORMATION
.000	2.000	.000	.000	SREF 2690.0000 SQ. FT.
.000	2.000	.000	.000	LREF 474.6000 INCHES
.000	2.000	.000	.000	BREF 936.6800 INCHES
.000	2.000	.000	.000	YMRP 1076.7000 IN. X0
				ZMRP .0000 IN. Y0
				SCALE 375.0000
				.0100

RCS JET AMPLIFICATION FACTOR - AXIAL FORCE, N(AF)

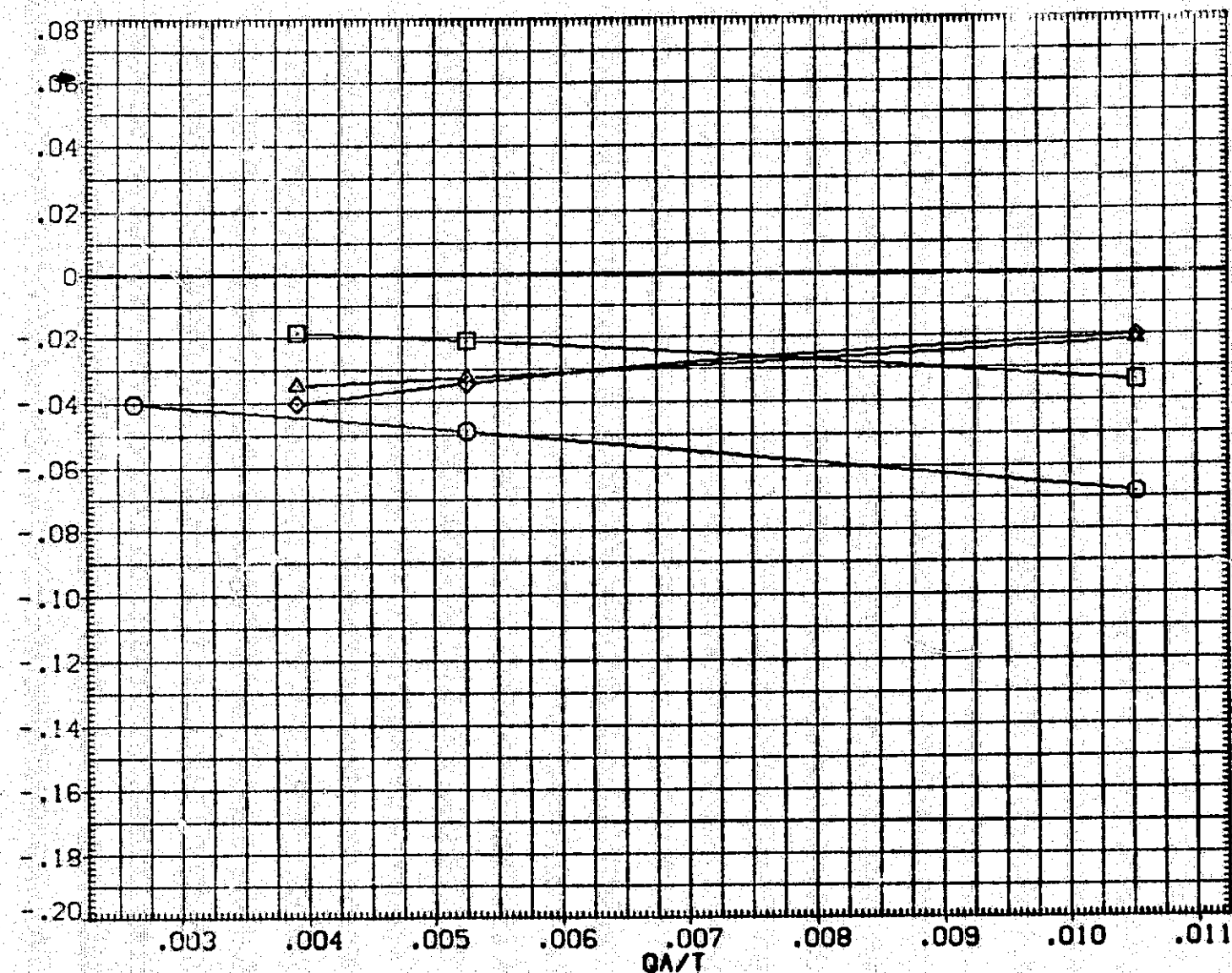


FIGURE 94. AREA RATIO EFFECTS, R/H UP FIRING JETS
(L) ALPHA = 20.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA075)	01N32 LARC CFHT 118 (MA-22)
(SJA076)	01N36 LARC CFHT 118 (MA-22)
(SJA077)	01N48 LARC CFHT 118 (MA-22)
(SJA078)	01N44 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BOFLAP	BETA	REFERENCE INFORMATION
.000	2.000	.000	.000	SREF 2690.0000 SQ.FT.
.000	2.000	.000	.000	LREF 474.8000 INCHES
.000	2.000	.000	.000	BREF 936.6800 INCHES
.000	2.000	.000	.000	XMRP 1076.7000 IN. X0
				YMRP .0000 IN. Y0
				ZMRP 375.0000 IN. Z0
				SCALE .0100

RCS JET AMPLIFICATION FACTOR - AXIAL FORCE, N(AF)

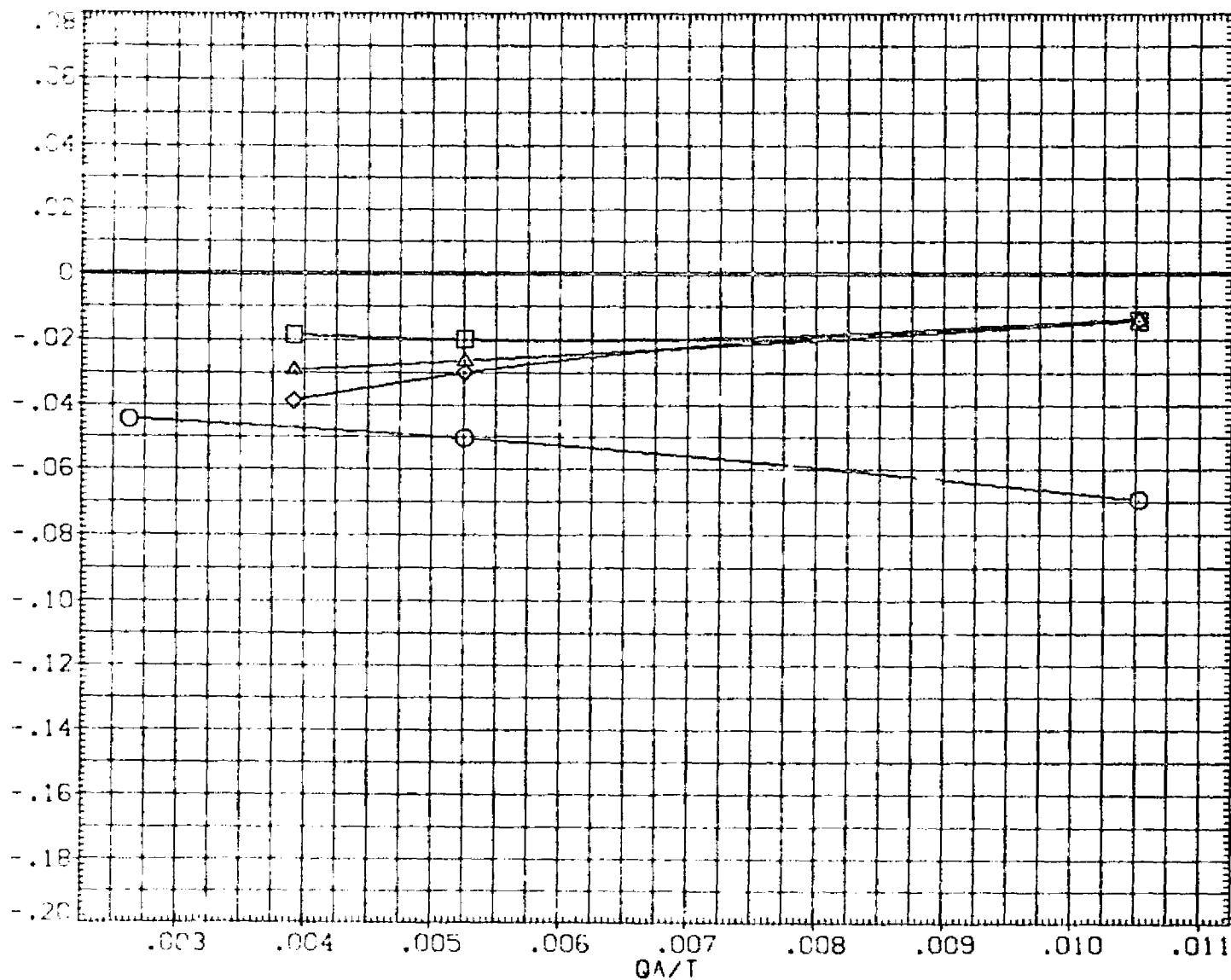


FIGURE 94. AREA RATIO EFFECTS, R/H UP FIRING JETS

(MCA) PHA = 25.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA075)	Q1N32 LARC CUNT 118 (MA-22)
(SJA076)	Q1N36 LARC CUNT 118 (MA-22)
(SJA077)	Q1N48 LARC CUNT 118 (MA-22)
(SJA078)	Q1N44 LARC CUNT 118 (MA-22)

ELEVON	NO. JET	BOFLAP	BETA	REFERENCE INFORMATION
.000	2.000	.000	.000	SREF 2690.0000 SQ. FT.
.000	2.000	.000	.000	LREF 474.8000 INCHES
.000	2.000	.000	.000	RREF 436.6800 INCHES
.000	2.000	.000	.000	MRP 1076.7000 IN. YD
.000	2.000	.000	.000	MRP 375.0000 IN. YD
				SCALE .0110

RCS JET AMPLIFICATION FACTOR - AXIAL FORCE, N(CAF)

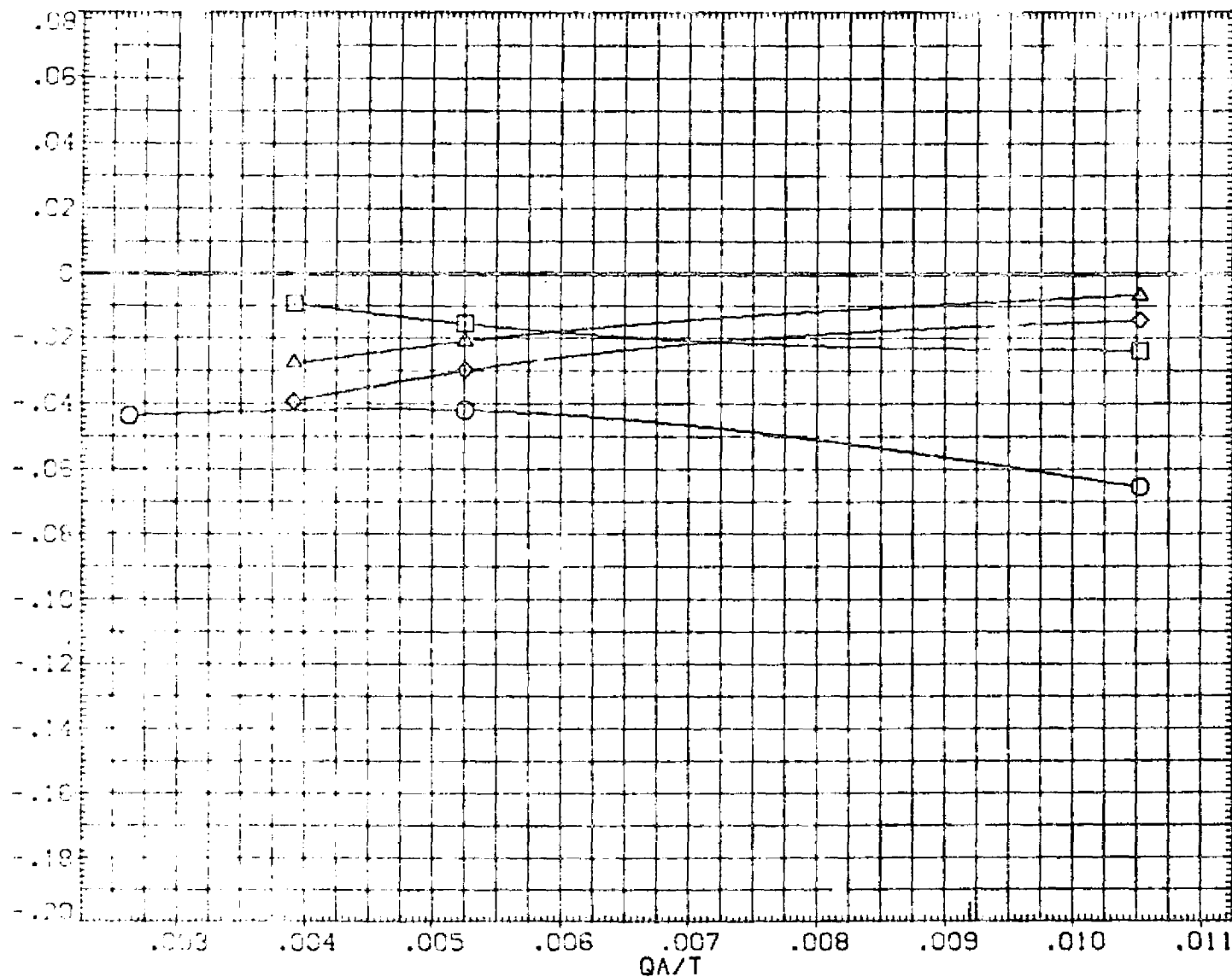


FIGURE 94. AREA RATIO EFFECTS, R/H UP FIRING JETS

(N)ALPHA = 30.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	NO. JET	BD FLAP	BETA	REFERENCE INFORMATION		
(SJAQ75)	01N32 LARC CFHT 118 (MA-22)	.000	2.000	.000	.000	SREF	2690.0000	SQ.FT.
(SJAQ76)	01N36 LARC CFHT 118 (MA-22)	.000	2.000	.000	.000	LREF	474.8000	INCHES
(SJAQ77)	01N48 LARC CFHT 118 (MA-22)	.000	2.000	.000	.000	BREF	936.6800	INCHES
(SJAQ78)	01N44 LARC CFHT 118 (MA-22)	.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
						YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0100	

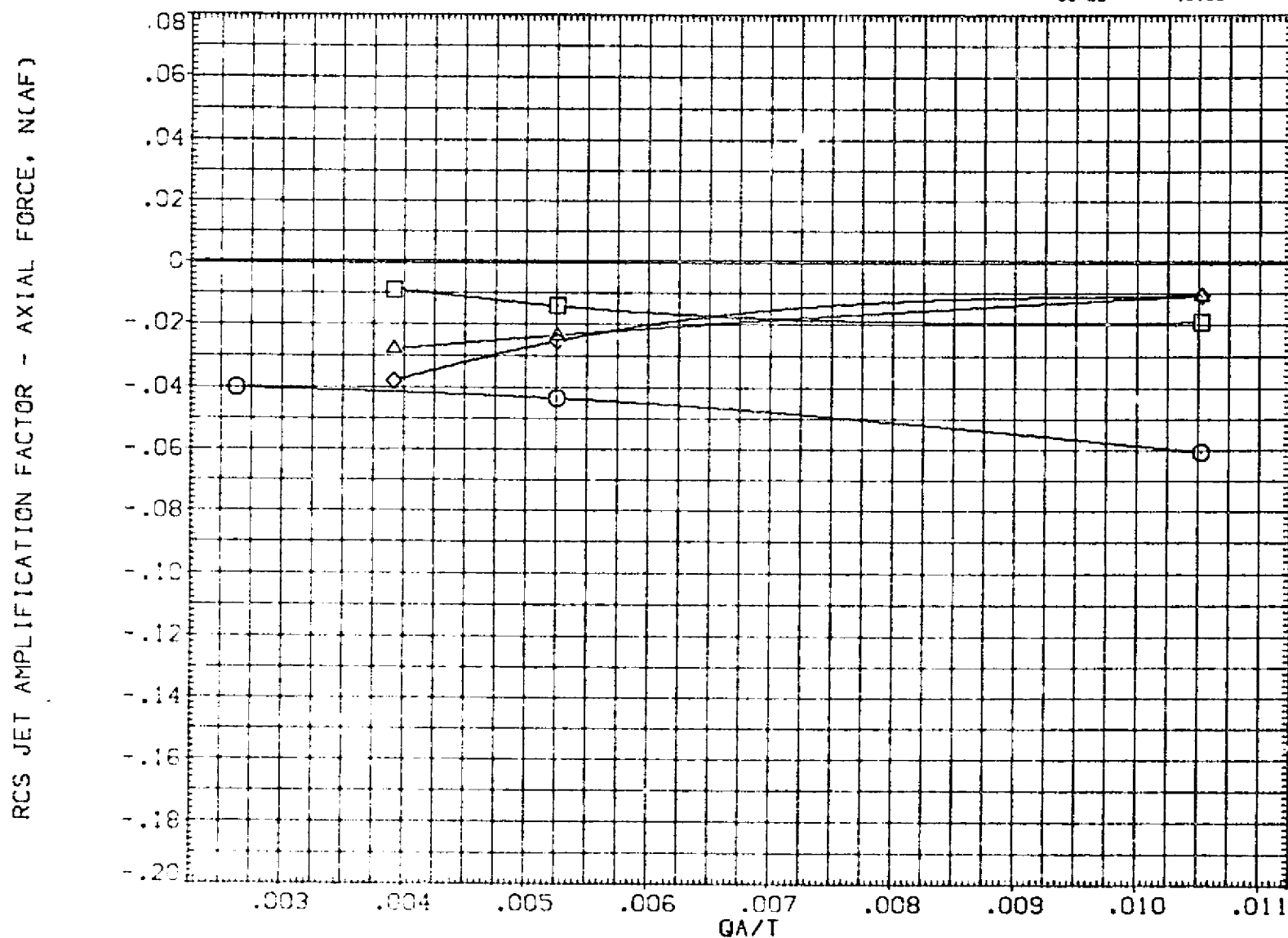


FIGURE 94. AREA RATIO EFFECTS, R/H UP FIRING JETS

(C) ALPHA = 35.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA075)	01N32 LARC CFHT 118 (MA-22)
(SJA076)	01N36 LARC CFHT 118 (MA-22)
(SJA077)	01N48 LARC CFHT 118 (MA-22)
(SJA078)	01N44 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BD FLAP	BETA	REFERENCE INFORMATION		
.000	2.000	.000	.000	SREF	2690.0000	50. FT.
.000	2.000	.000	.000	LREF	474.8000	INC. 1/2
.000	2.000	.000	.000	BREF	936.6800	INC. 1/2
.000	2.000	.000	.000	XMRP	1076.7000	IN. 3
				XMRP	.0000	IN. Y3
				YMRP	375.0000	IN. 3
				SCALE	.0100	

ROLL JET AMPLIFICATION FACTOR - ROLL. N(RM)

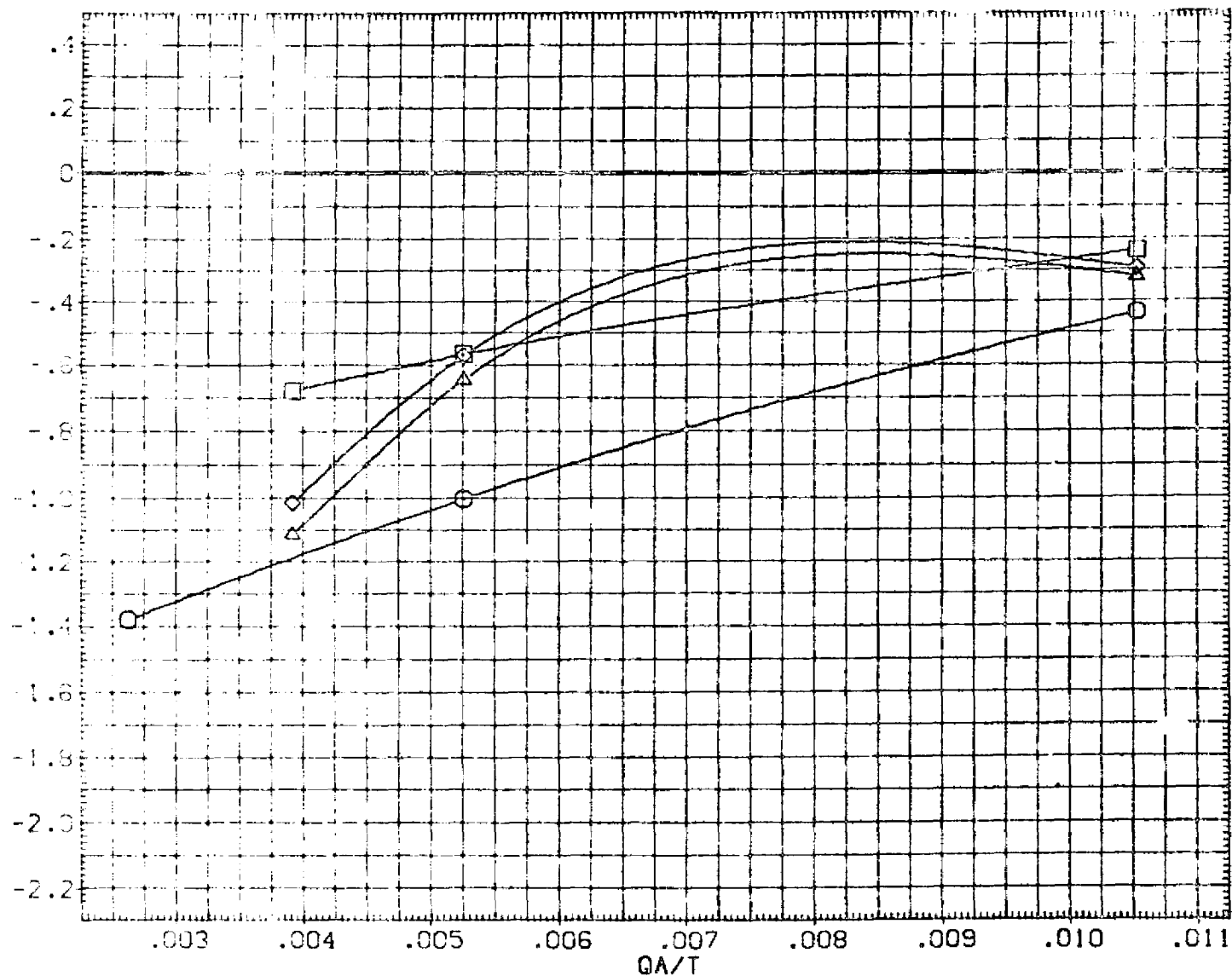


FIGURE 94. AREA RATIO EFFECTS, R/H UP FIRING JETS

(A) ALPHA = -8.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA075)	01N32 LARC CFHT 118 (MA-22)
(SJA076)	01N36 LARC CFHT 118 (MA-22)
(SJA077)	01N48 LARC CFHT 118 (MA-22)
(SJA078)	01N44 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BOFLAP	BETA	REFERENCE INFORMATION
.000	2.000	.000	.000	SREF 2690.0000 SQ. FT.
.000	2.000	.000	.000	LREF 474.8000 INCHES
.000	2.000	.000	.000	BREF 936.6800 INCHES
.000	2.000	.000	.000	XMRP 1076.7000 IN. X0
				YMRP .0000 IN. Y0
				ZMRP 375.0000 IN. Z0
				SCALE .0100

RCS JET AMPLIFICATION FACTOR - ROLL. N(RM)

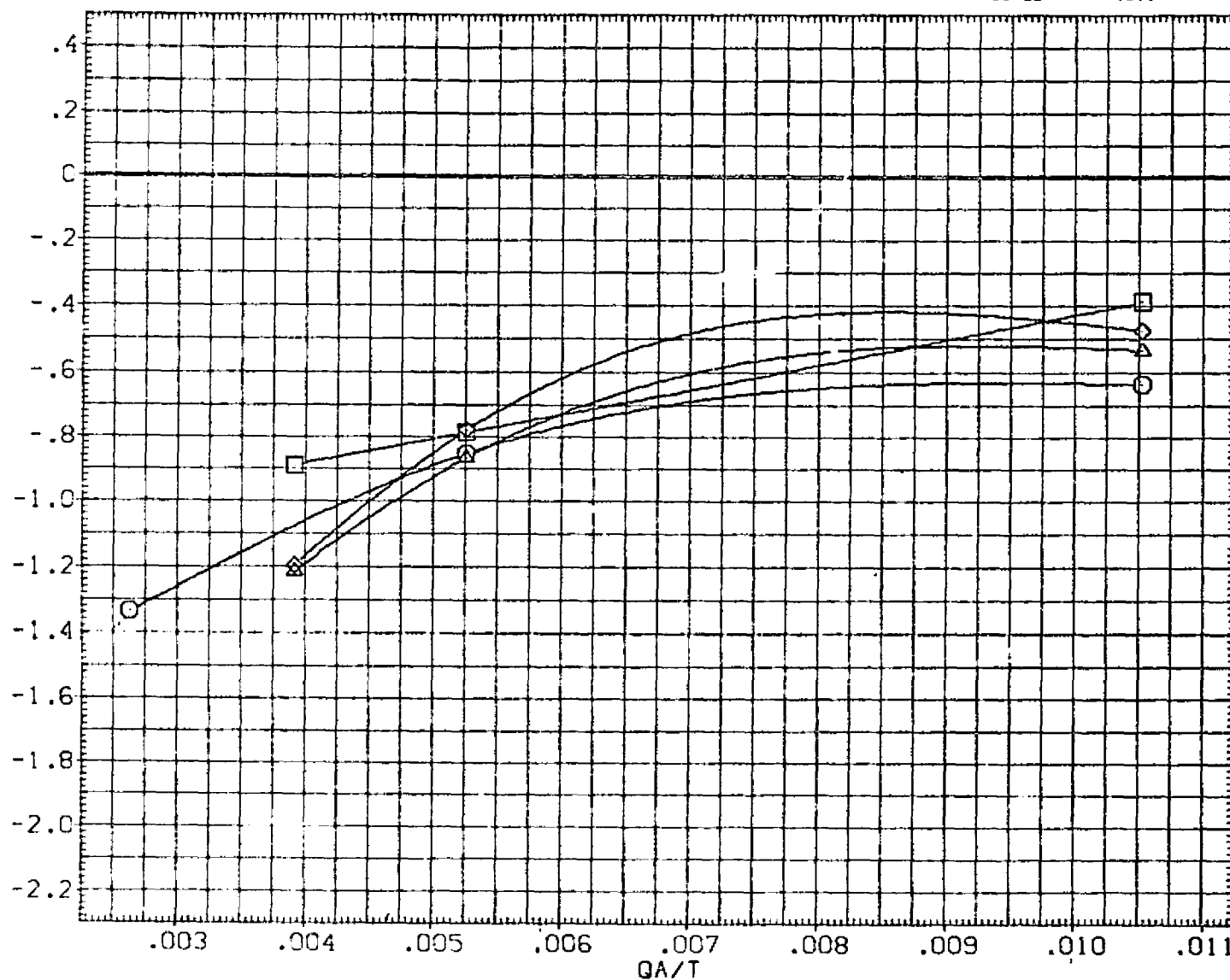
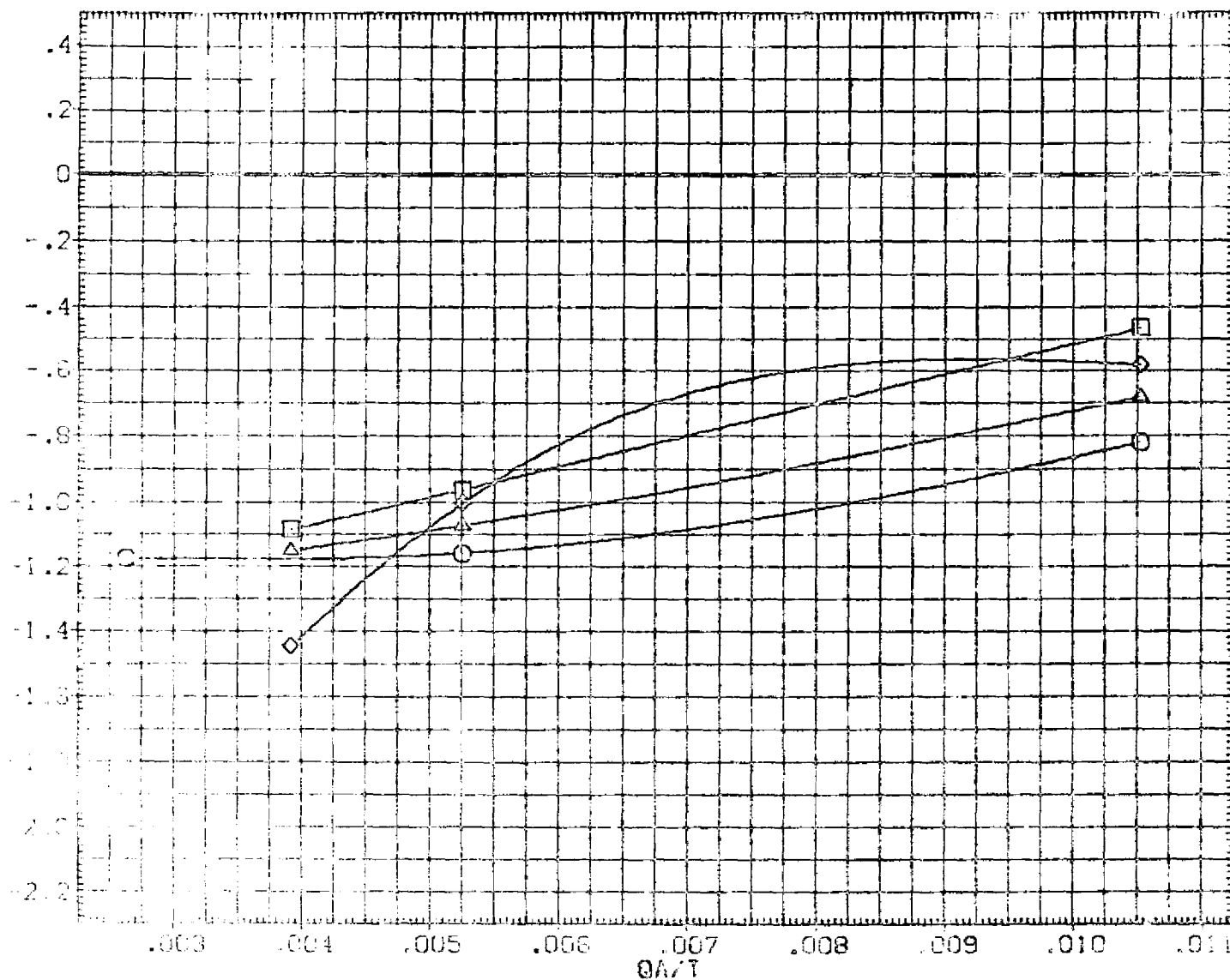


FIGURE 94. AREA RATIO EFFECTS, R/H UP FIRING JETS
(B) ALPHA = -6.00



DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA075)	01N32 LARC CFHT 118 (MA-22)
(SJA076)	01N36 LARC CFHT 118 (MA-22)
(SJA077)	01N48 LARC CFHT 118 (MA-22)
(SJA078)	01N44 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BD FLAP	BETA	REFERENCE INFORMATION
.000	2.000	.000	.000	SREF 2690.0000 SQ. FT.
.000	2.000	.000	.000	LREF 474.8000 INCHES
.000	2.000	.000	.000	BREF 936.6800 INCHES
.000	2.000	.000	.000	XMRP 1076.7000 IN. X0
				YMRP .0000 IN. Y0
				ZMRP 375.0000 IN. Z0
				SCALE .0100

RCS JET AMPLIFICATION FACTOR - ROLL, N(RN)

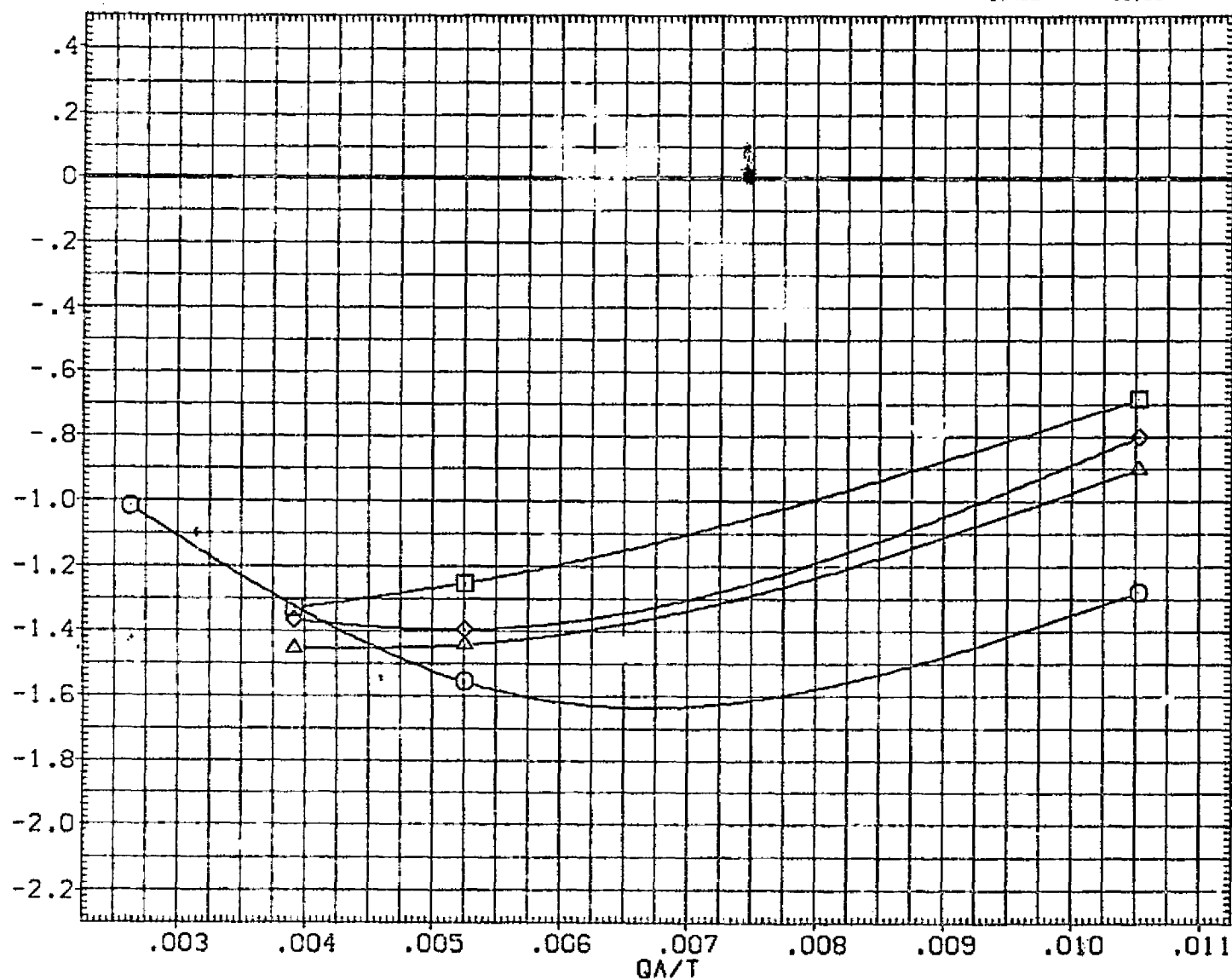


FIGURE 94. AREA RATIO EFFECTS, R/H UP FIRING JETS

(D) ALPHA = -2.00

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(SJA075)	□	01N32	LARC CFHT 118 (MA-22)
(SJA076)	◇	01N36	LARC CFHT 118 (MA-22)
(SJA077)	△	01N48	LARC CFHT 118 (MA-22)
(SJA078)	△	01N44	LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BOFLAP	BETA	REFERENCE INFORMATION		
.000	2.000	.000	.000	SREF	2690.0000	50. FT.
.000	2.000	.000	.000	LREF	474.8000	INCHES
.000	2.000	.000	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - ROLL, NCRM

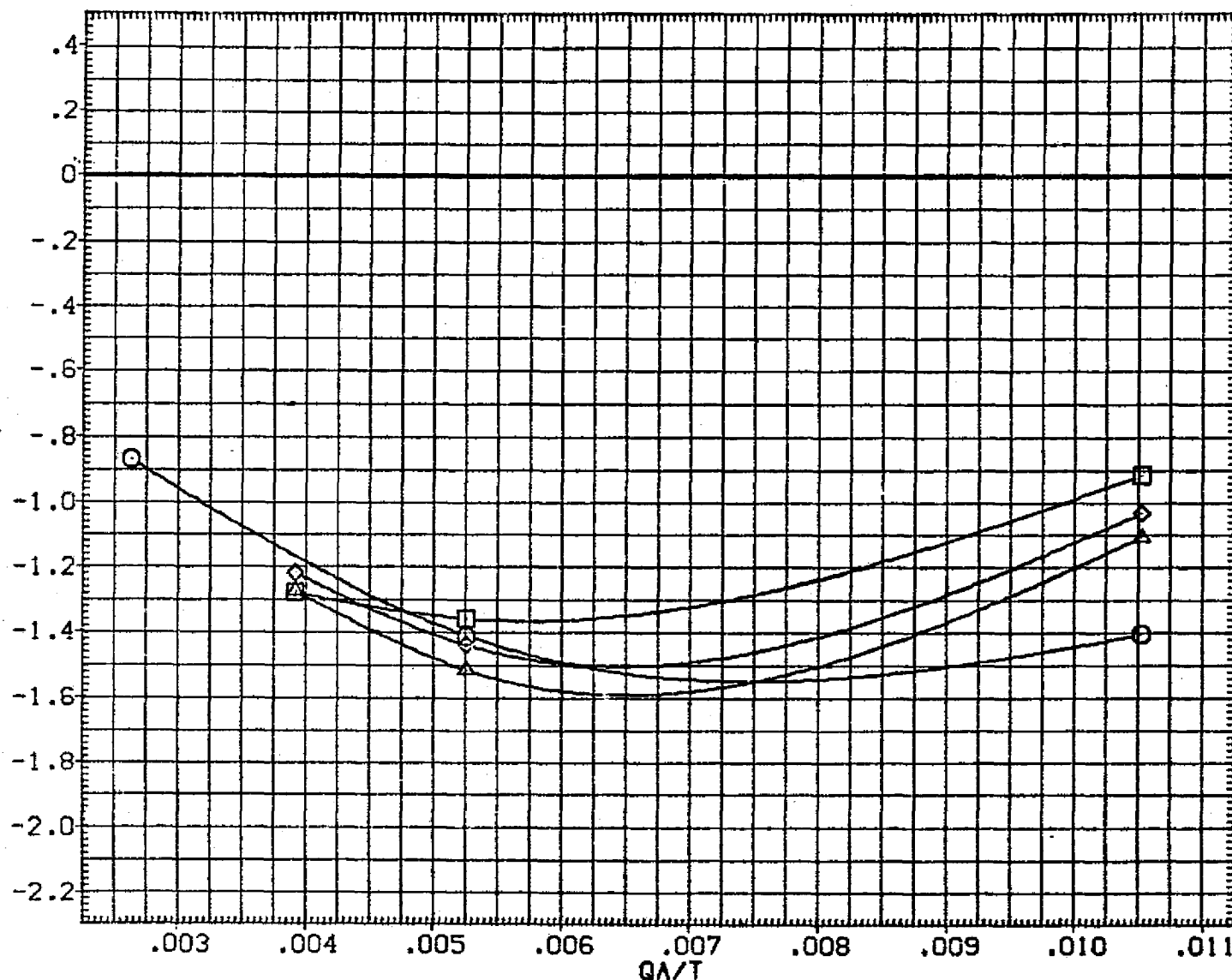


FIGURE 94. AREA RATIO EFFECTS, R/H UP FIRING JETS
(E) ALPHA = .00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA075) □	01N32 LARC CFHT 118 (MA-22)
(SJA076) □	01N36 LARC CFHT 118 (MA-22)
(SJA077) ◇	01N33 LARC CFHT 118 (MA-22)
(SJA078) △	01N44 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BOFLAP	BETA	REFERENCE INFORMATION		
.000	2.000	.000	.000	SREF	2690.0000	50. FT.
.000	2.000	.000	.000	LREF	474.8000	INCHES
.000	2.000	.000	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.0100	

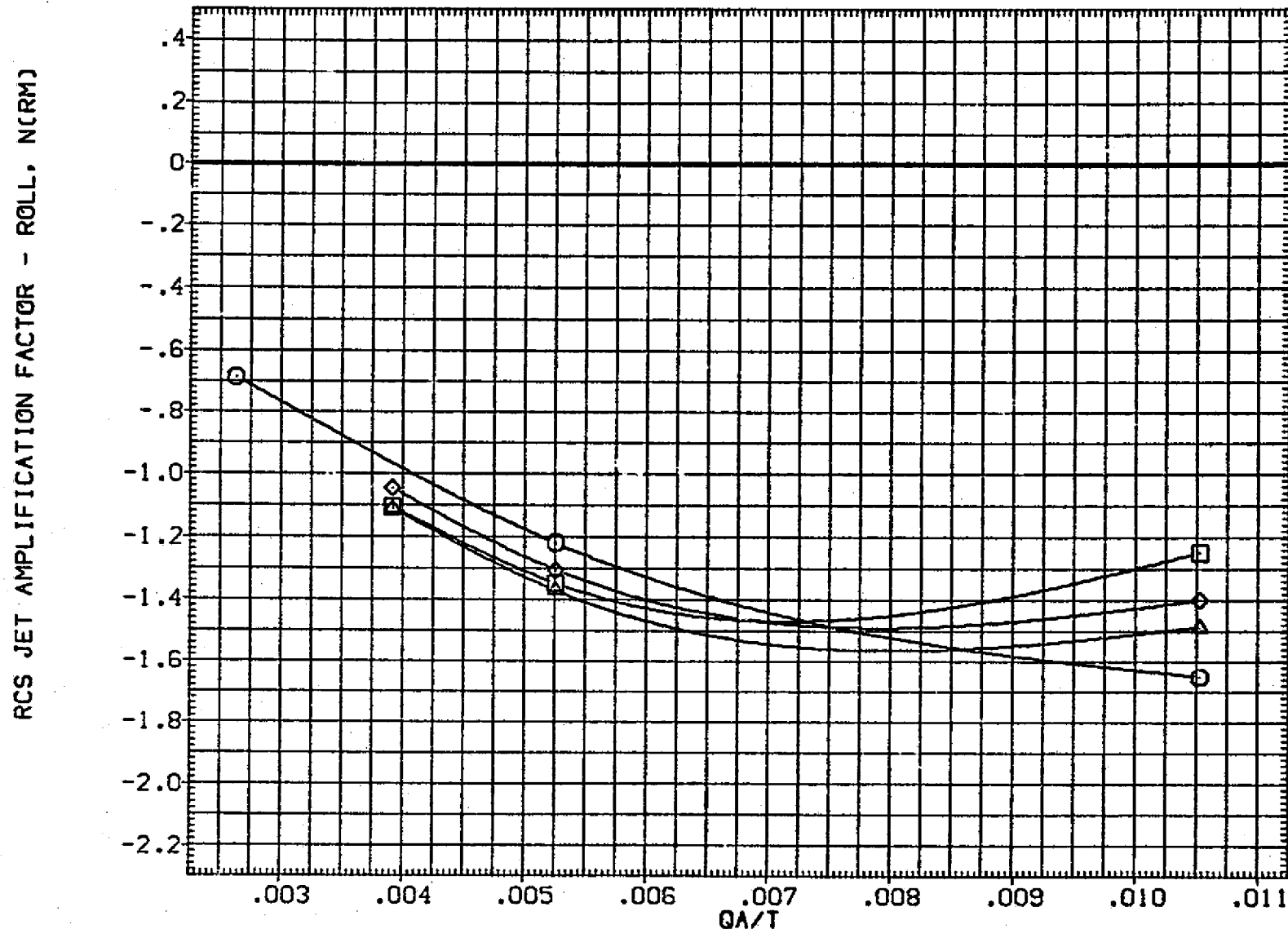


FIGURE 94. AREA RATIO EFFECTS, R/H UP FIRING JETS
(F)ALPHA = 2.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA075) □	01N32 LARC CFHT 118 (MA-22)
(SJA076) □	01N36 LARC CFHT 118 (MA-22)
(SJA077) □	01N48 LARC CFHT 118 (MA-22)
(SJA078) △	01N44 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BOFLAP	BETA	REFERENCE INFORMATION
.000	2.000	.000	.000	SREF 2690.0000 SQ. FT.
.000	2.000	.000	.000	LREF 474.8000 INCHES
.000	2.000	.000	.000	BREF 936.6800 INCHES
.000	2.000	.000	.000	XMRP 1076.7000 IN. X0
.000	2.000	.000	.000	YMRP .0000 IN. Y0
				ZMRP 375.0000 IN. Z0
				SCALE .0100

RCS JET AMPLIFICATION FACTOR - ROLL, N(RM)

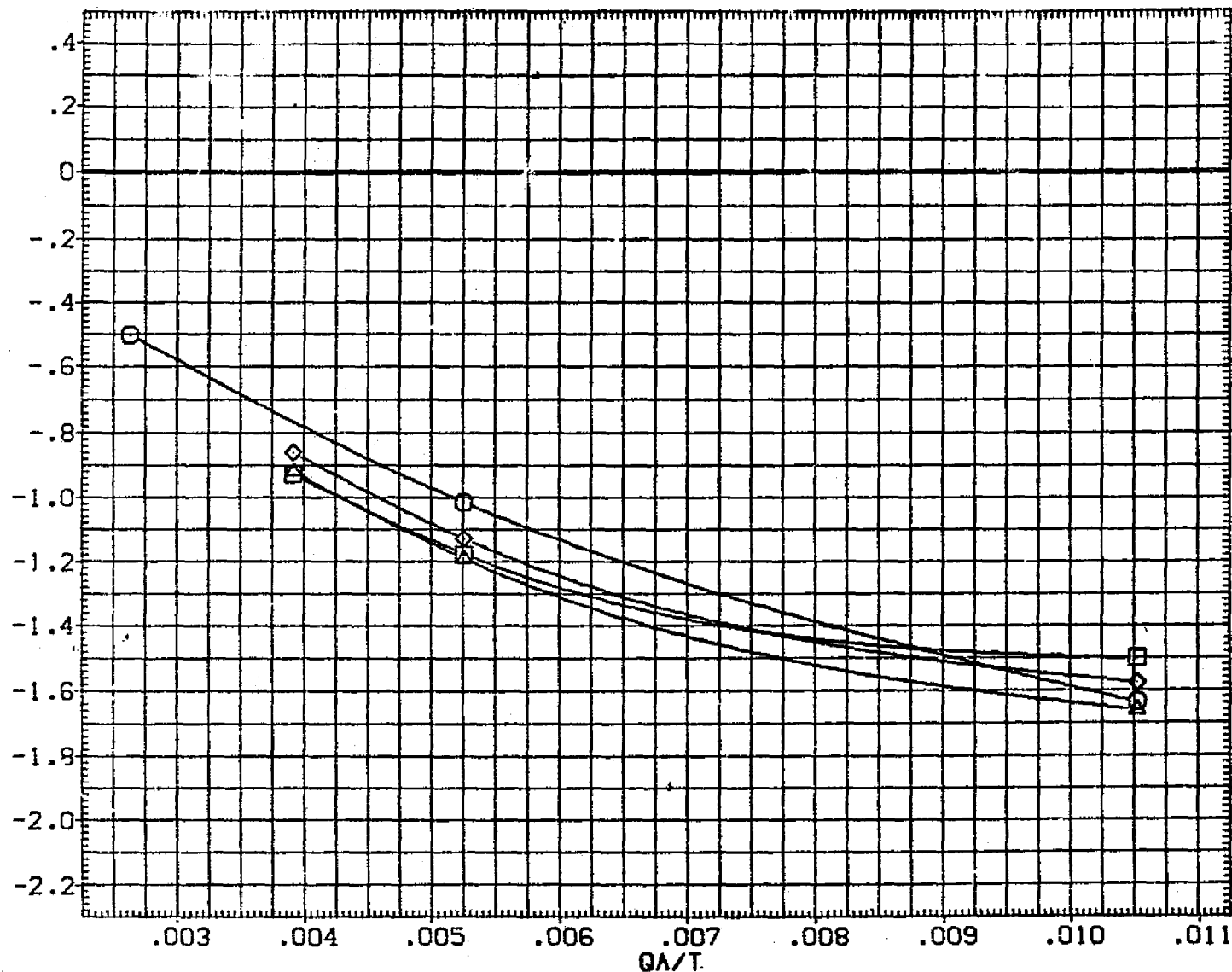


FIGURE 94. AREA RATIO EFFECTS, R/H UP FIRING JETS
(G) ALPHA = 4.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA075) ○	01N32 LARC CFHT 118 (MA-22)
(SJA076) □	01N36 LARC CFHT 118 (MA-22)
(SJA077) ◇	01N48 LARC CFHT 118 (MA-22)
(SJA078) △	01N44 LARC CFHT 118 (MA-22)

ELEVON	NO.JET	BDFLAP	BETA	REFERENCE INFORMATION		
.000	2.000	.000	.000	SREF	2690.0000	50.FT.
.000	2.000	.000	.000	LREF	474.8000	INCHES
.000	2.000	.000	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - ROLL. NCRM)

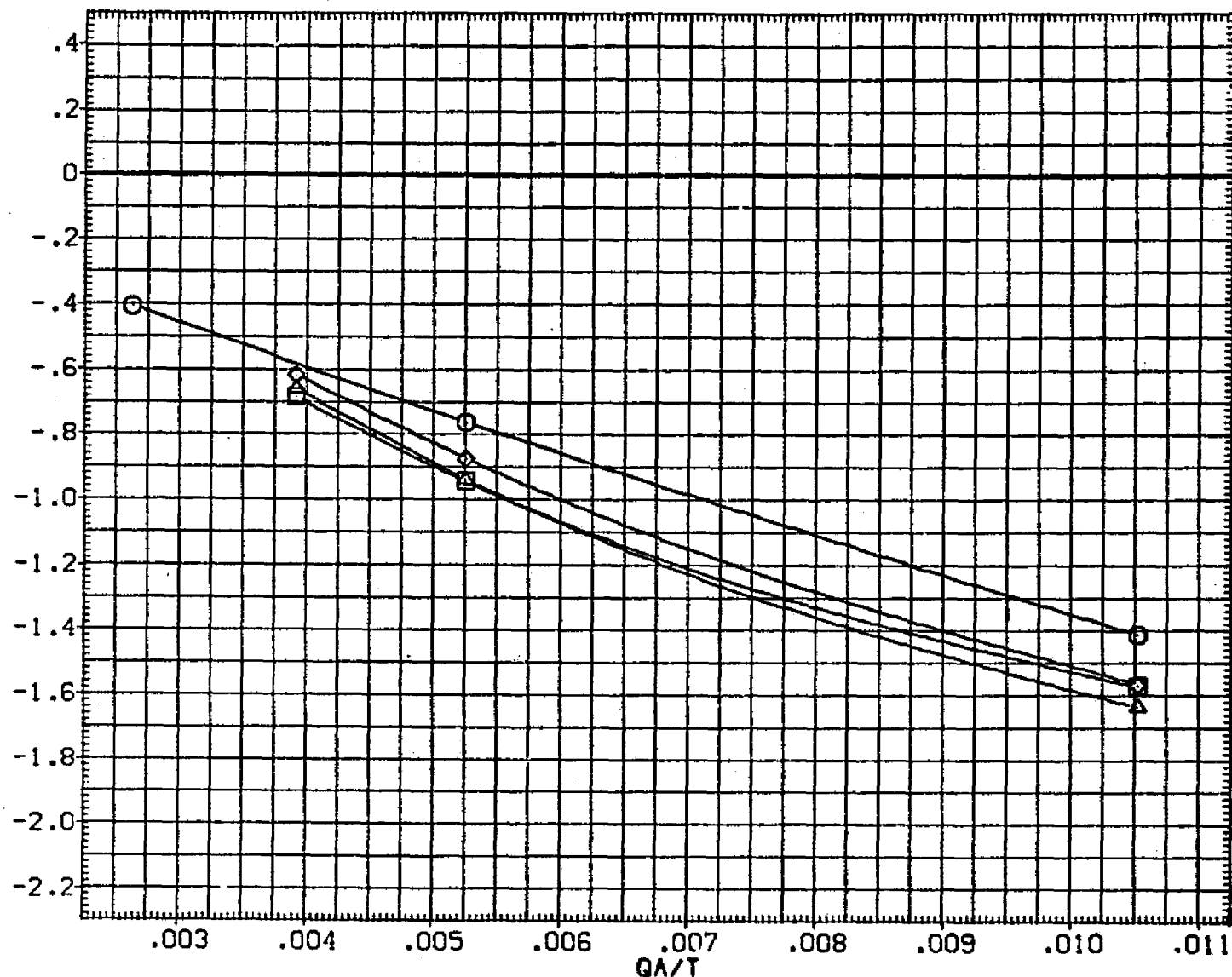


FIGURE 94. AREA RATIO EFFECTS, R/H UP FIRING JETS

(H)ALPHA = 6.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA075)	01N32 LARC CFHT 118 (MA-22)
(SJA076)	01N36 LARC CFHT 118 (MA-22)
(SJA077)	01N48 LARC CFHT 118 (MA-22)
(SJA078)	01N44 LARC CFHT 118 (MA-22)

ELEVON	NO.JET	BDFLAP	BETA	REFERENCE INFORMATION
.000	2.000	.000	.000	SREF 2690.0000 SQ.FT.
.000	2.000	.000	.000	LREF 474.8000 INCHES
.000	2.000	.000	.000	BREF 936.6800 INCHES
.000	2.000	.000	.000	AMRP 1076.7000 IN. X0
.000	2.000	.000	.000	CMRP .0000 IN. Y0
.000	2.000	.000	.000	DMRP 375.0000 IN. Z0
				SCALE .0100

RCS JET AMPLIFICATION FACTOR - ROLL. (NRM)

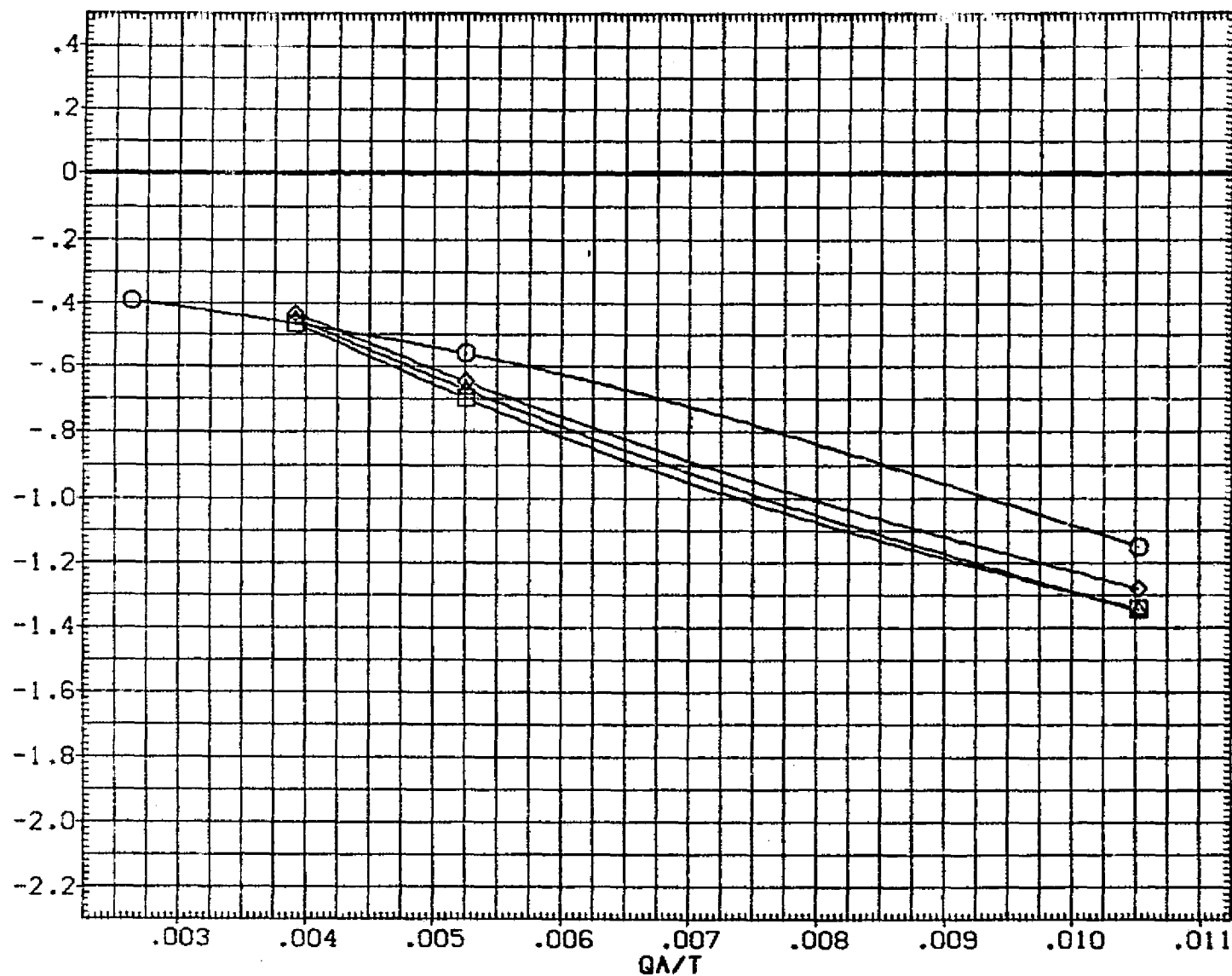


FIGURE 94. AREA RATIO EFFECTS, R/H UP FIRING JETS
(1) ALPHA = 8.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA075)	01N32 LARC CFHT 118 (MA-22)
(SJA076)	01N36 LARC CFHT 118 (MA-22)
(SJA077)	01N48 LARC CFHT 118 (MA-22)
(SJA078)	01N44 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BOFLAP	BETA	REFERENCE INFORMATION		
.000	2.000	.000	.000	SREF	2090.0000	50. FT.
.000	2.000	.000	.000	LREF	474.8000	INCHES
.000	2.000	.000	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - ROLL, N(RM)

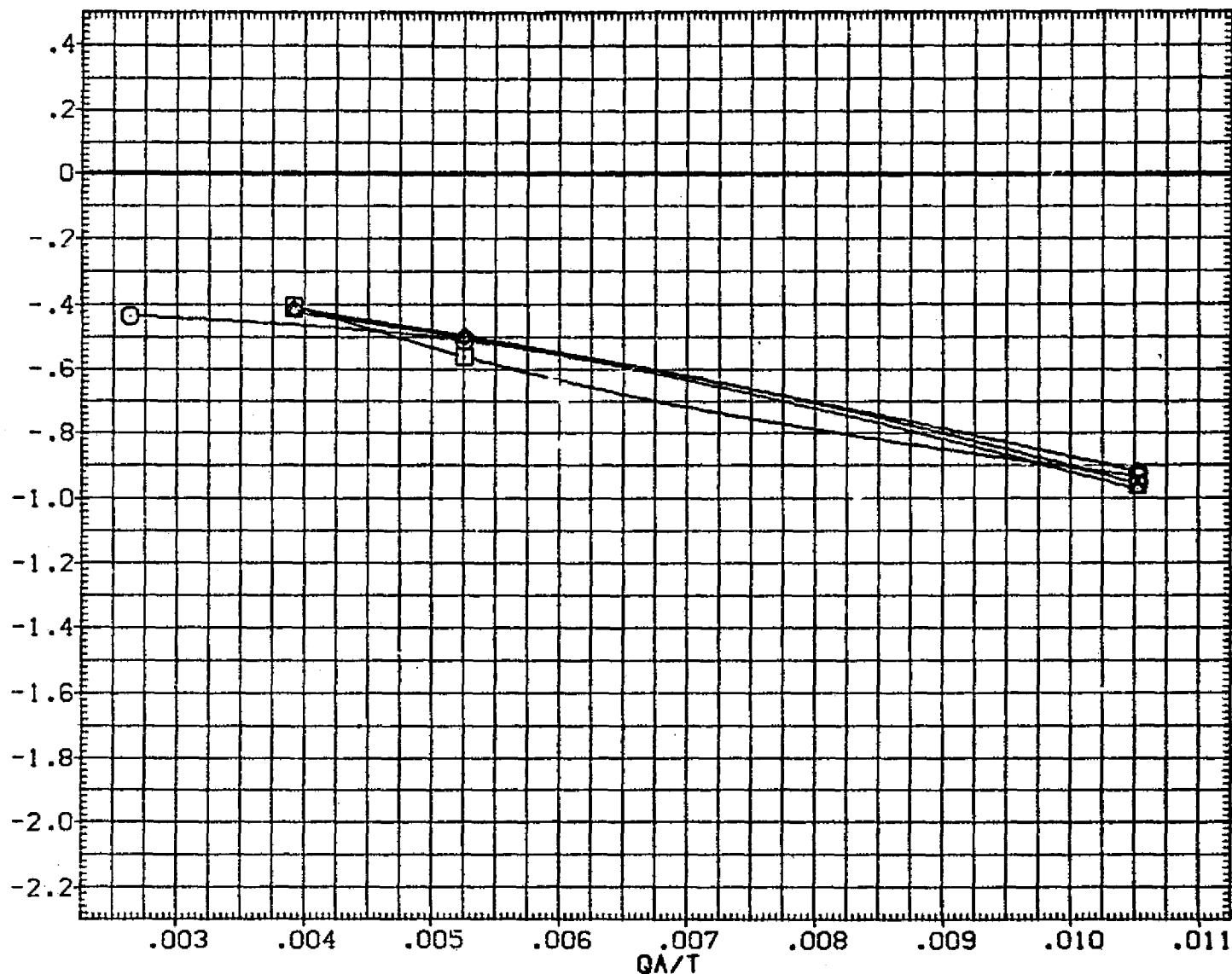


FIGURE 94. AREA RATIO EFFECTS, R/H UP FIRING JETS
(J)ALPHA = 10.00

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION
(SJA075)	□	01N32 LARC CFHT 118 (MA-22)
(SJA076)	□	01N36 LARC CFHT 118 (MA-22)
(SJA077)	△	01N48 LARC CFHT 118 (MA-22)
(SJA078)	△	01N44 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BOFLAP	BETA	REFERENCE INFORMATION		
.000	2.000	.000	.000	SREF	2690.0000	SQ. FT.
.000	2.000	.000	.000	LREF	474.8000	INCHES
.000	2.000	.000	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XHRP	1076.7000	IN. X0
				YHRP	.0000	IN. Y0
				ZHRP	375.0000	IN. Z0
				SCALE	.0100	

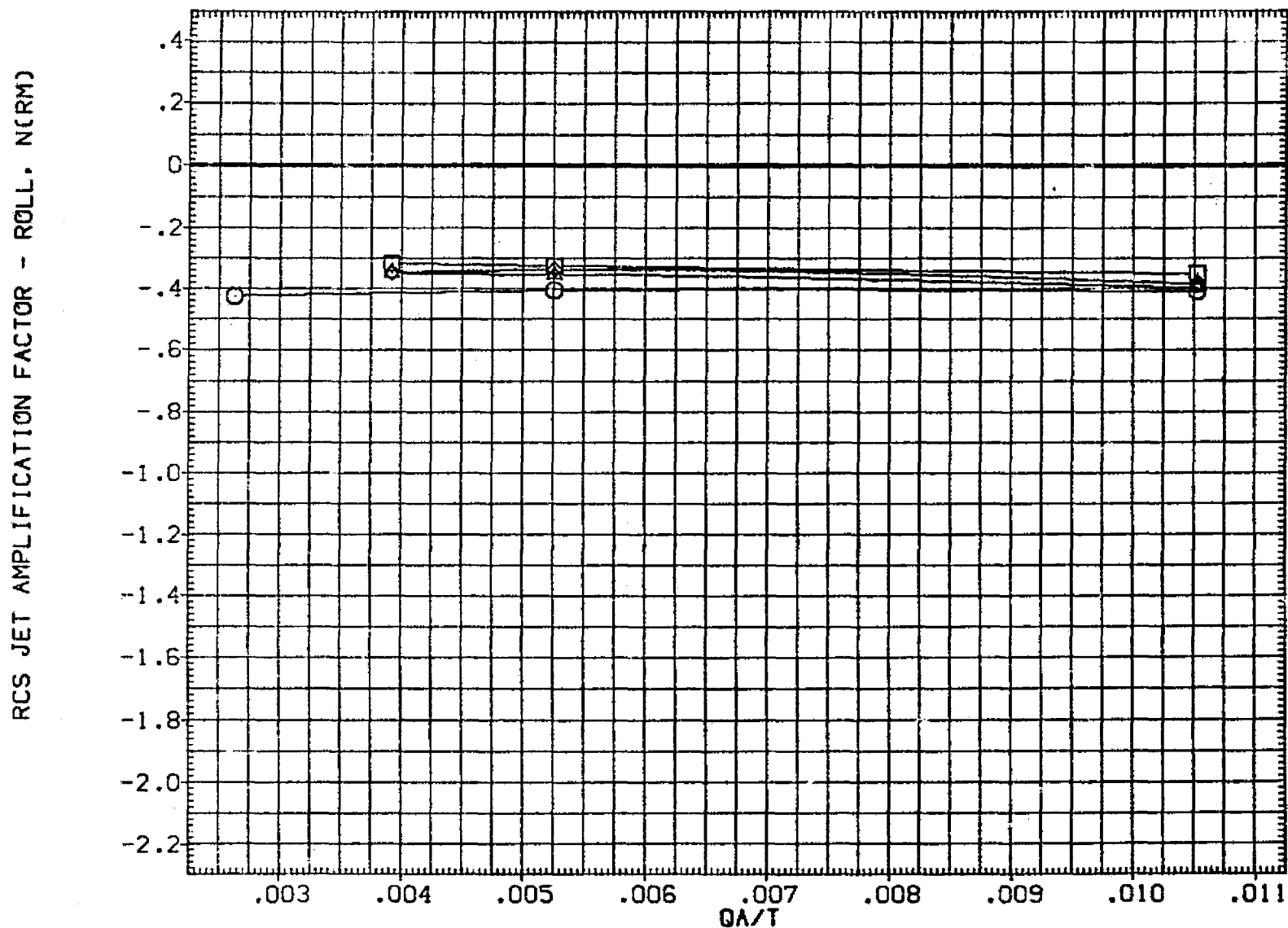


FIGURE 94. AREA RATIO EFFECTS, R/H UP FIRING JETS
(K)ALPHA = 15.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA075) ○	01N32 LARC CFHT 118 (MA-22)
(SJA076) □	01N36 LARC CFHT 118 (MA-22)
(SJA077) ◇	01N48 LARC CFHT 118 (MA-22)
(SJA078) △	01N44 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BOFLAP	BETA	REFERENCE INFORMATION		
.000	2.000	.000	.000	SREF	2690.0000	SQ. FT.
.000	2.000	.000	.000	LREF	474.8000	INCHES
.000	2.000	.000	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - ROLL, NCRM

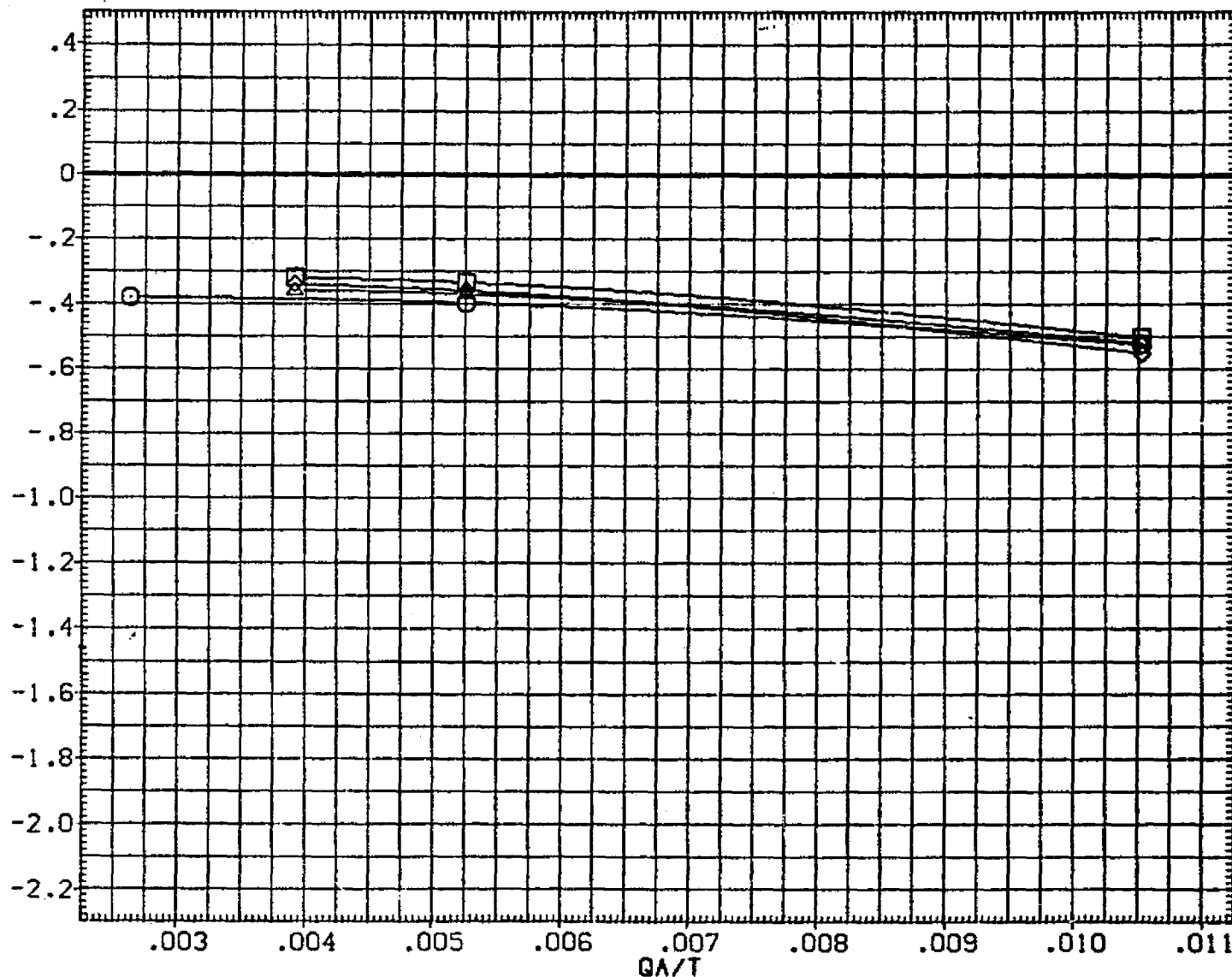


FIGURE 94. AREA RATIO EFFECTS, R/H UP FIRING JETS

(L) ALPHA = 20.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA075)	01N32 LARC CFHT 118 (MA-22)
(SJA076)	01N36 LARC CFHT 118 (MA-22)
(SJA077)	01N48 LARC CFHT 118 (MA-22)
(SJA078)	01N44 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BOFLAP	BETA	REFERENCE INFORMATION
.000	2.000	.000	.000	SREF 2690.0000 SQ. FT.
.000	2.000	.000	.000	LREF 474.8000 INCHES
.000	2.000	.000	.000	BREF 936.8800 INCHES
.000	2.000	.000	.000	XMRP 1076.7000 IN. X0
				YMRP .0000 IN. Y0
				ZMRP 375.0000 IN. Z0
				SCALE .0100

RCS JET AMPLIFICATION FACTOR - ROLL, N(RM)

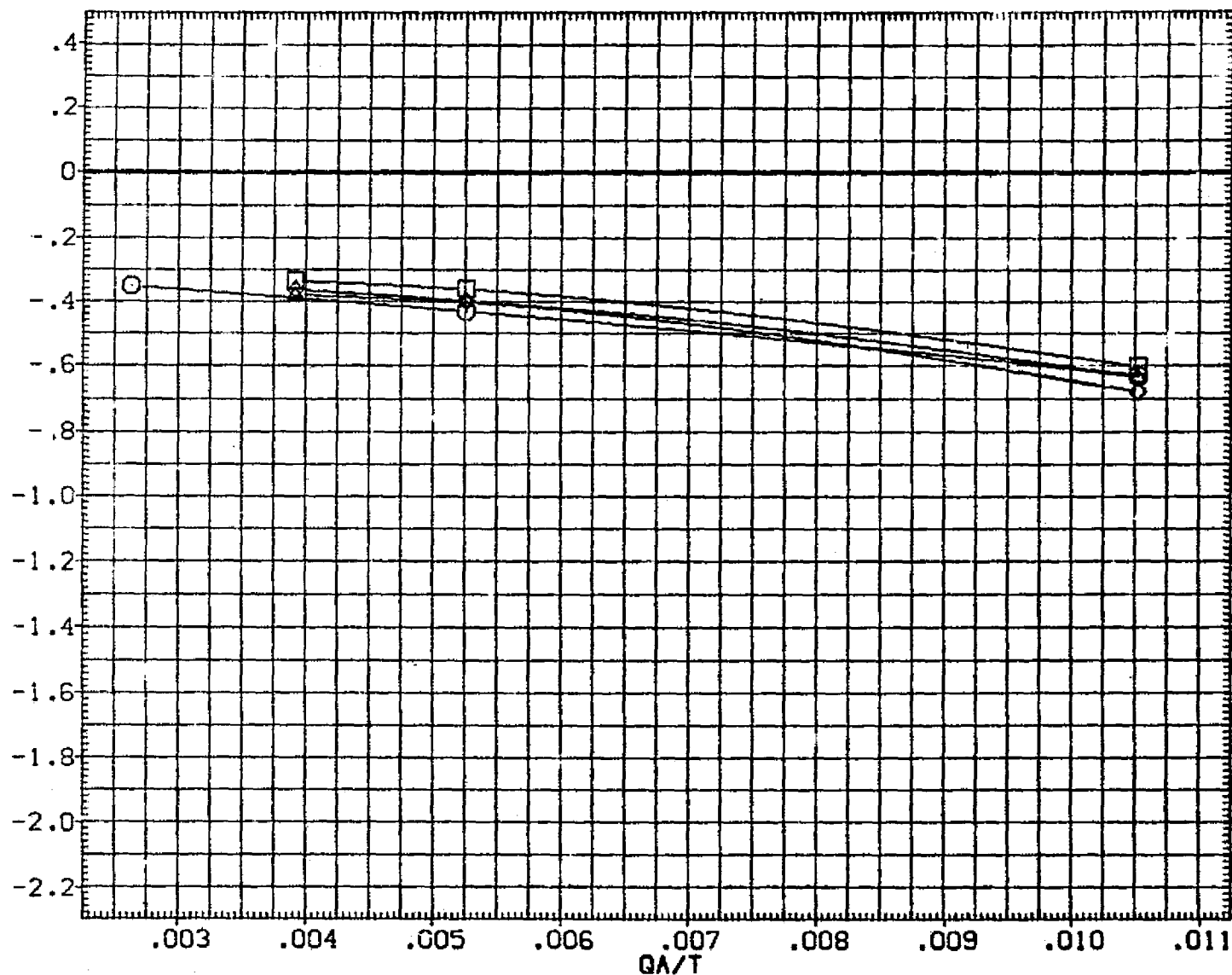


FIGURE 94. AREA RATIO EFFECTS, R/H UP FIRING JETS
(M)ALPHA = 25.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA075) □	01N32 LARC CFHT 118 (MA-22)
(SJA076) □	01N36 LARC CFHT 118 (MA-22)
(SJA077) ◇	01N48 LARC CFHT 118 (MA-22)
(SJA078) △	01N44 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BOFLAP	BETA	REFERENCE INFORMATION	
.000	2.000	.000	.000	SREF	2690.0000 SQ. FT.
.000	2.000	.000	.000	LREF	474.8000 INCHES
.000	2.000	.000	.000	BREF	936.6800 INCHES
.000	2.000	.000	.000	XMRP	1076.7000 IN. X0
				YMRP	.0000 IN. Y0
				ZMRP	375.0000 IN. Z0
				SCALE	.0100

RCS JET AMPLIFICATION FACTOR - ROLL, N(RM)

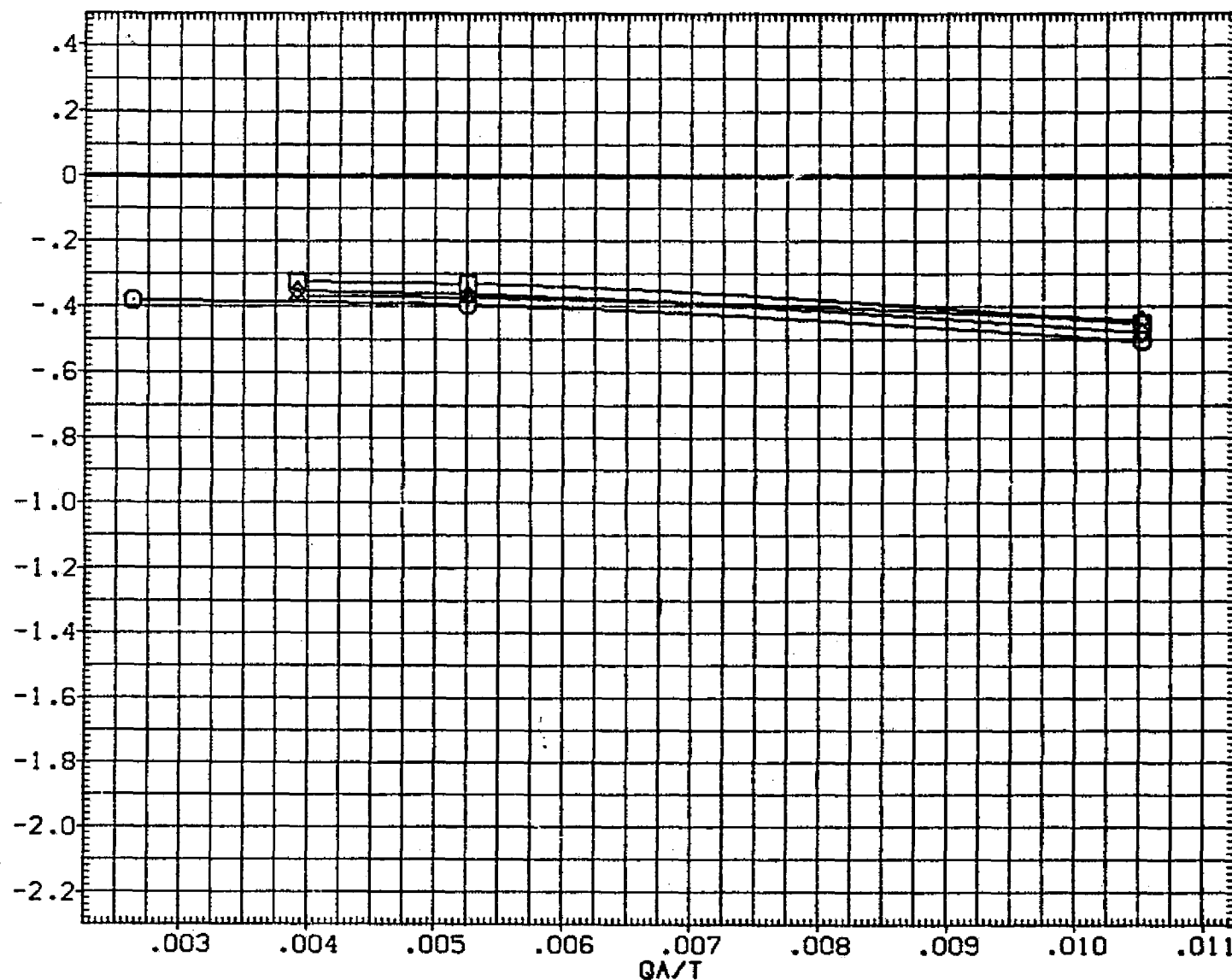


FIGURE 94. AREA RATIO EFFECTS, R/H UP FIRING JETS
(N)ALPHA = 30.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA075)	01N32 LARC CFHT 118 (MA-22)
(SJA076)	01N36 LARC CFHT 118 (MA-22)
(SJA077)	01N48 LARC CFHT 118 (MA-22)
(SJA078)	01N44 LARC CFHT 118 (MA-22)

ELEVON	NO.JET	BOFLAP	BETA	REFERENCE INFORMATION
.000	2.000	.000	.000	SREF 2690.0000 SQ.FT.
.000	2.000	.000	.000	LREF 474.8000 INCHES
.000	2.000	.000	.000	BREF 936.6800 INCHES
.000	2.000	.000	.000	XMRP 1076.7000 IN. X0
				YMRP .0000 IN. Y0
				ZMRP 375.0000 IN. Z0
				SCALE .0100

RCS JET AMPLIFICATION FACTOR - ROLL, N(RM)

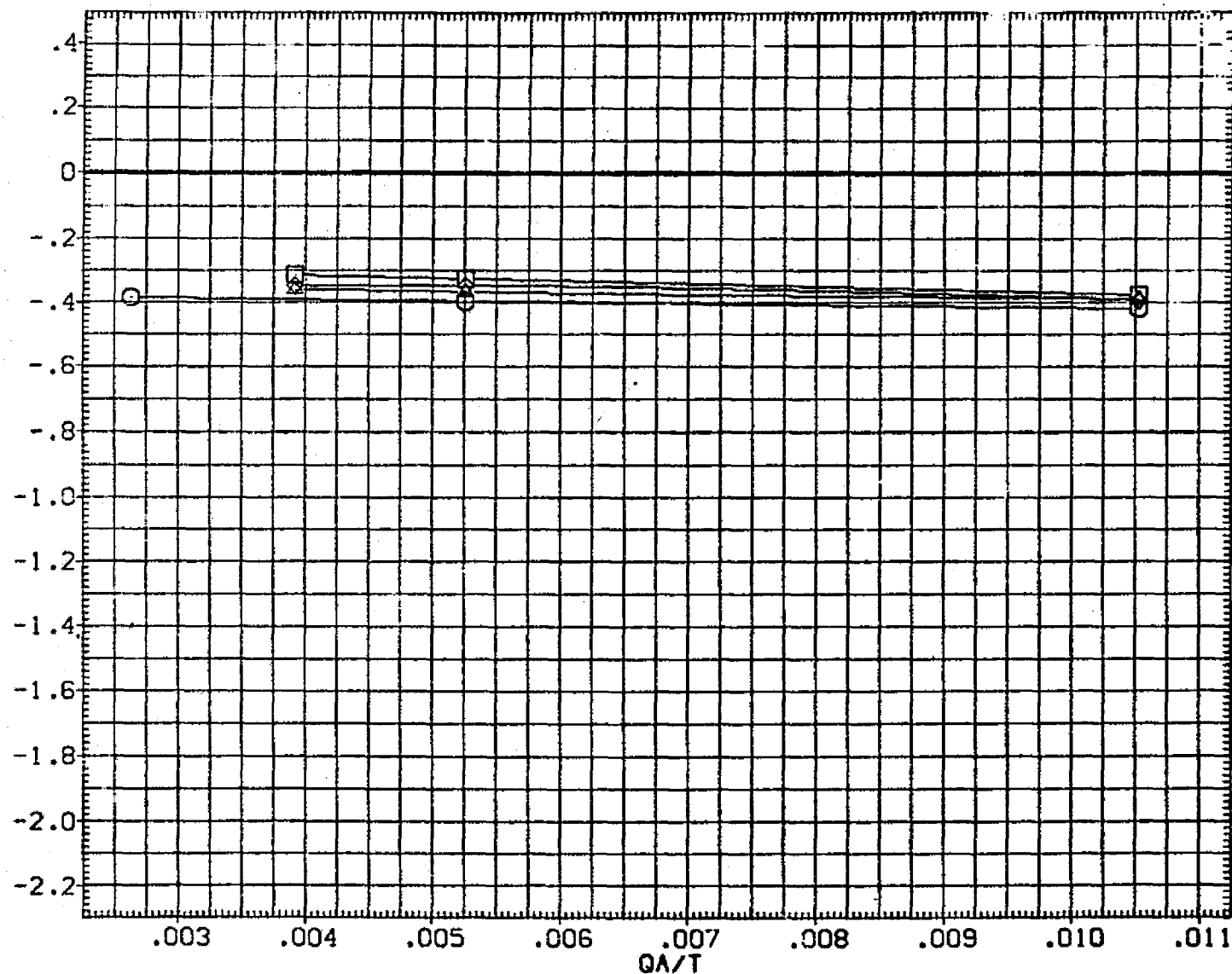


FIGURE 94. AREA RATIO EFFECTS, R/H UP FIRING JETS

(0) ALPHA = 35.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA075)	01N32 LARC CFHT 118 (MA-22)
(SJA076)	01N36 LARC CFHT 118 (MA-22)
(SJA077)	01N48 LARC CFHT 118 (MA-22)
(SJA078)	01N44 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BOFLAP	BETA	REFERENCE INFORMATION		
.000	2.000	.000	.000	SREF	2690.0000	50. FT.
.000	2.000	.000	.000	LREF	474.8000	INCHES
.000	2.000	.000	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - YAW, NCM)

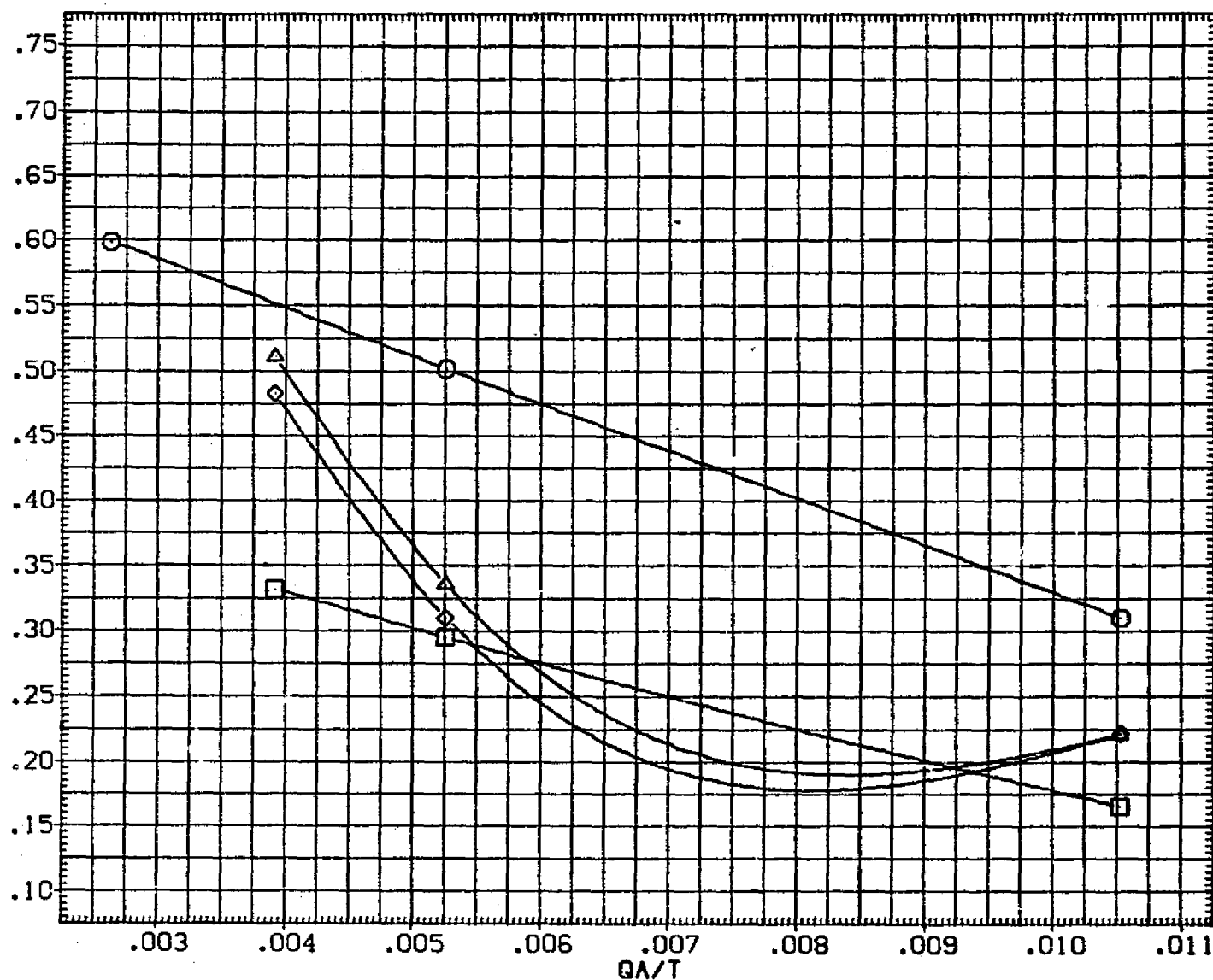


FIGURE 94. AREA RATIO EFFECTS, R/H UP FIRING JETS

(A) ALPHA = -8.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA075) ○	01N32 LARC CFHT 118 (MA-22)
(SJA076) □	01N36 LARC CFHT 118 (MA-22)
(SJA077) △	01N48 LARC CFHT 118 (MA-22)
(SJA078) ◇	01N44 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BD FLAP	BETA	REFERENCE INFORMATION
.000	2.000	.000	.000	SREF 2690.0000 SQ. FT.
.000	2.000	.000	.000	LREF 474.8000 INCHES
.000	2.000	.000	.000	BREF 936.6800 INCHES
.000	2.000	.000	.000	XMRP 1076.7000 IN. X0
				YMRP .0000 IN. Y0
				ZMRP 375.0000 IN. Z0
				SCALE .0100

RCS JET AMPLIFICATION FACTOR - YAW, NCYM

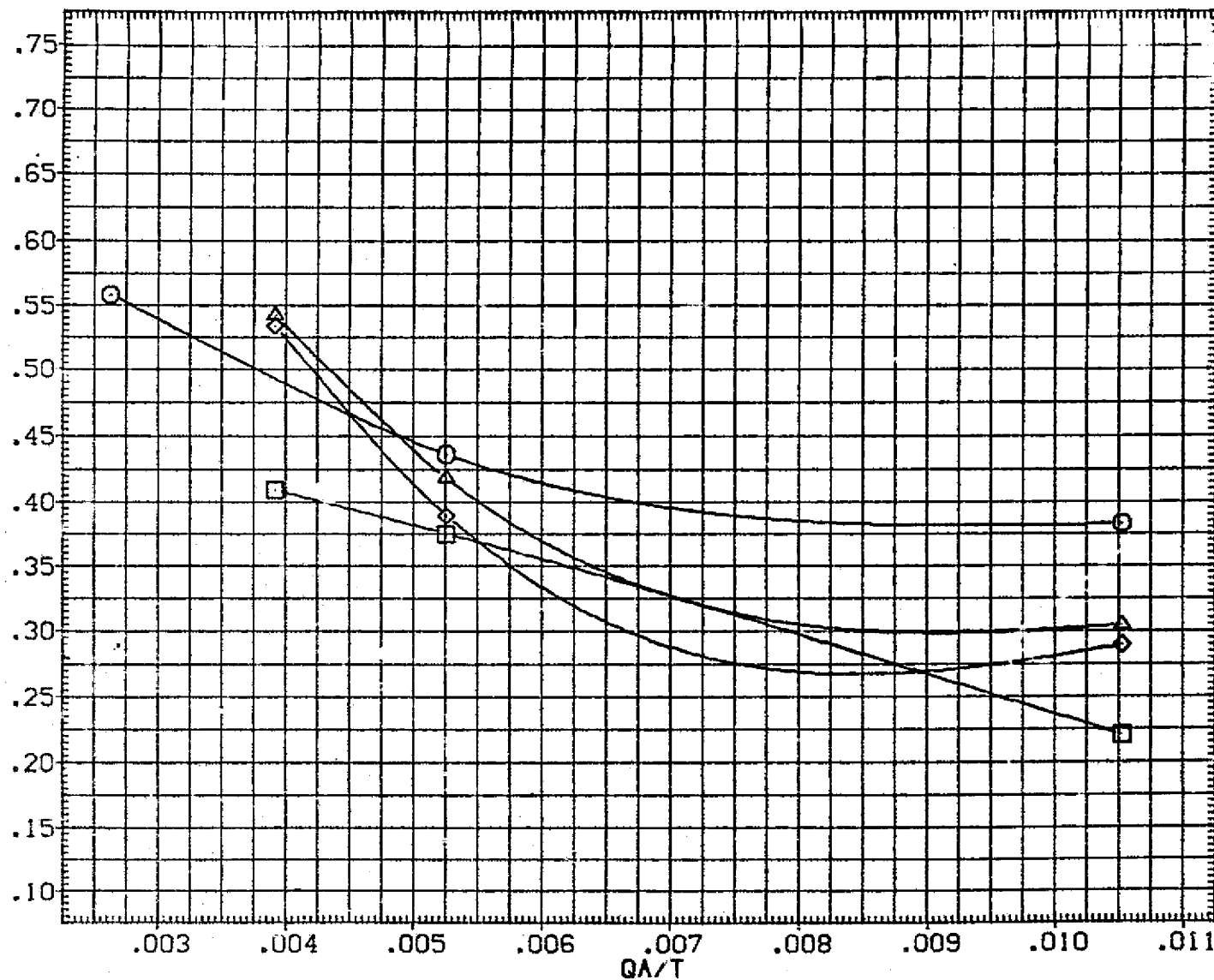


FIGURE 94. AREA RATIO EFFECTS, R/H UP FIRING JETS

(B) ALPHA = 6.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA075)	01N32 LARC CFHT 118 (MA-22)
(SJA076)	01N36 LARC CFHT 118 (MA-22)
(SJA077)	01N48 LARC CFHT 118 (MA-22)
(SJA078)	01N44 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BDFLAP	BETA	REFERENCE INFORMATION
.000	2.000	.000	.000	SREF 2690.0000 SQ. FT.
.000	2.000	.000	.000	LREF 474.8000 INCHES
.000	2.000	.000	.000	BREF 936.6800 INCHES
.000	2.000	.000	.000	XMRF 1076.7000 IN. X0
				YMRF .0000 IN. Y0
				ZMRF 375.0000 IN. Z0
				SCALE .0100

RCS JET AMPLIFICATION FACTOR - YAW, NCYM

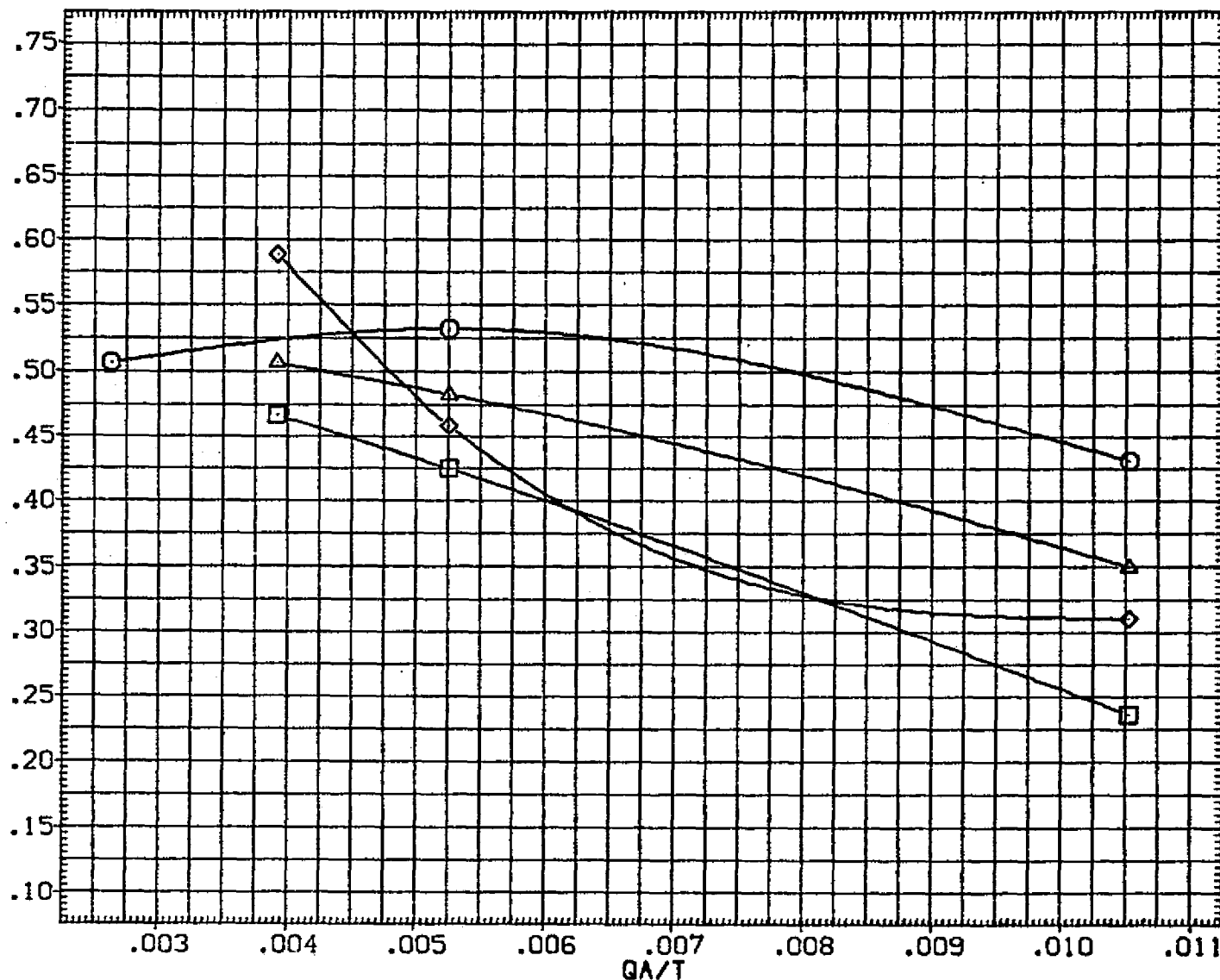


FIGURE 94. AREA RATIO EFFECTS, R/H UP FIRING JETS
(C) ALPHA = -4.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA075)	01N32 LARC CFHT 118 (MA-22)
(SJA076)	01N36 LARC CFHT 118 (MA-22)
(SJA077)	01N48 LARC CFHT 118 (MA-22)
(SJA078)	01N44 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BD FLAP	BETA	REFERENCE INFORMATION
.000	2.000	.000	.000	SREF 2690.0000 SQ. FT.
.000	2.000	.000	.000	LREF 474.8000 INCHES
.000	2.000	.000	.000	BREF 936.6800 INCHES
.000	2.000	.000	.000	XMRP 1076.7000 IN. X0
				YMRP .0000 IN. Y0
				ZMRP 375.0000 IN. Z0
				SCALE .0100

RCS JET AMPLIFICATION FACTOR - YAW, NCYM

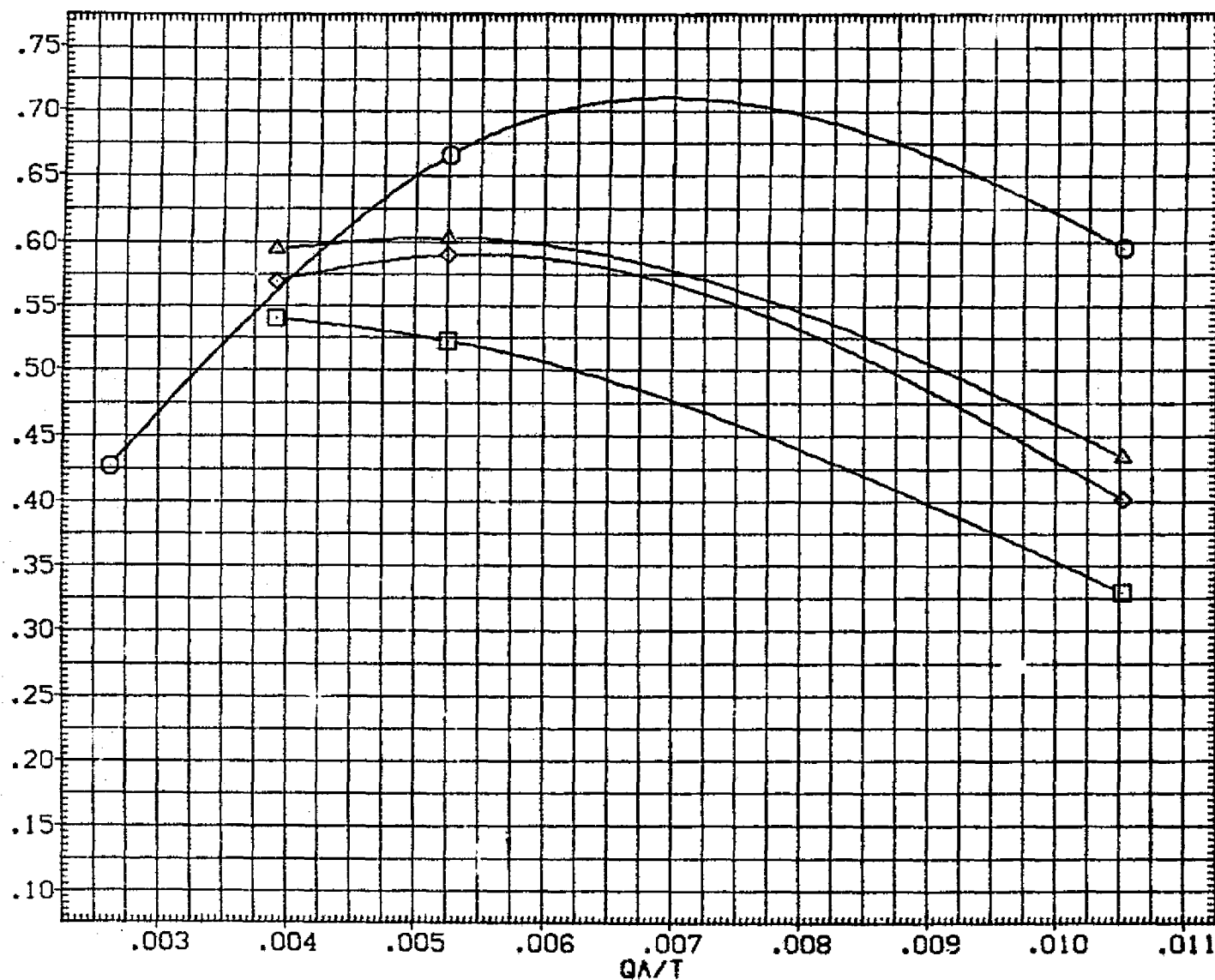


FIGURE 94. AREA RATIO EFFECTS, R/H UP FIRING JETS
(D) ALPHA = -2.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA075) ○	01N32 LARC CFHT 118 (MA-22)
(SJA076) □	01N36 LARC CFHT 118 (MA-22)
(SJA077) ◇	01N48 LARC CFHT 118 (MA-22)
(SJA078) △	01N44 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BDFLAP	BETA	REFERENCE INFORMATION
.000	2.000	.000	.000	SREF 2690.0000 SQ. FT.
.000	2.000	.000	.000	LREF 474.8000 INCHES
.000	2.000	.000	.000	BREF 936.6800 INCHES
.000	2.000	.000	.000	XMRP 1076.7000 IN. X0
.000	2.000	.000	.000	YMRP .0000 IN. Y0
.000	2.000	.000	.000	ZMRP 375.0000 IN. Z0
				SCALE .0100

RCS JET AMPLIFICATION FACTOR - YAW, N(YM)

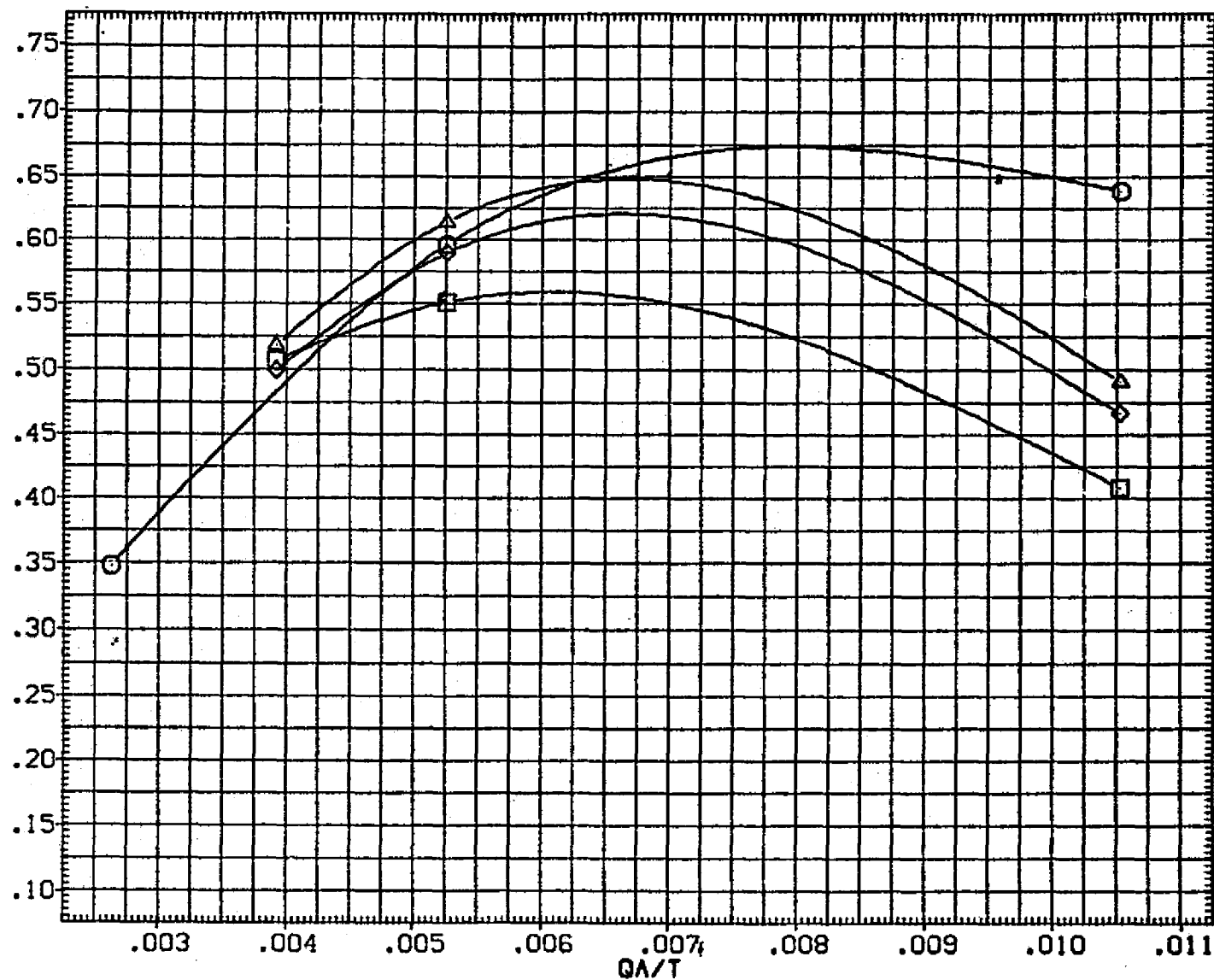


FIGURE 94. AREA RATIO EFFECTS, R/H UP FIRING JETS
(E) ALPHA = .00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA075) □	01N32 LARC CFHT 118 (MA-22)
(SJA076) ◇	01N36 LARC CFHT 118 (MA-22)
(SJA077) △	01N48 LARC CFHT 118 (MA-22)
(SJA078) △	01N44 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BDFLAP	BETA	REFERENCE INFORMATION		
.000	2.000	.000	.000	SREF	2690.0000	50. FT.
.000	2.000	.000	.000	LREF	474.8000	INCHES
.000	2.000	.000	.000	BREF	336.6800	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - YAW, NCM)

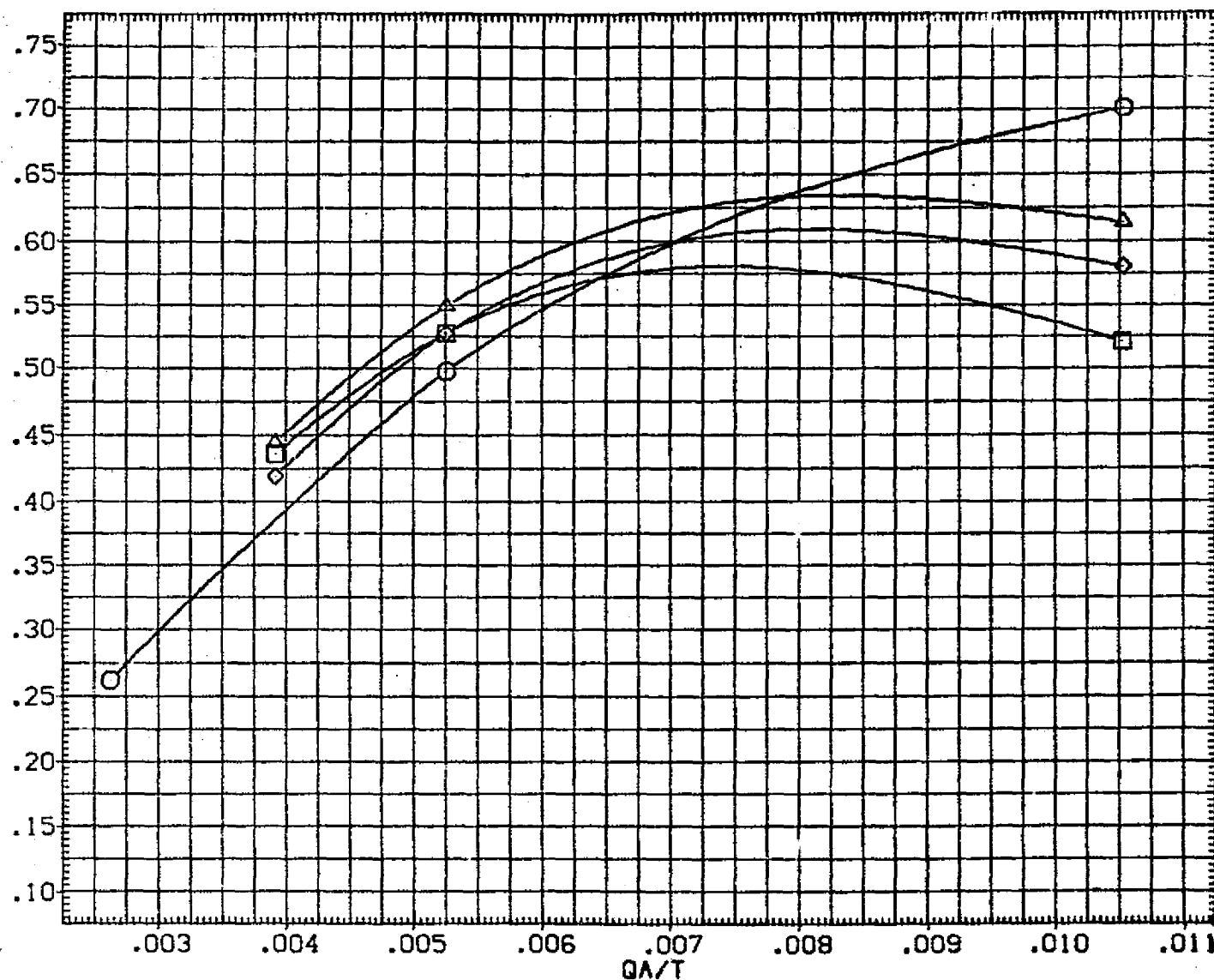


FIGURE 94. AREA RATIO EFFECTS, R/H UP FIRING JETS
(F)ALPHA = 2.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA075)	01N32 LARC CFHT 118 (MA-22)
(SJA076)	01N36 LARC CFHT 118 (MA-22)
(SJA077)	01N48 LARC CFHT 118 (MA-22)
(SJA078)	01N44 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BOFLAP	BETA	REFERENCE INFORMATION		
.000	2.000	.000	.000	SREF	2690.0000	50. FT.
.000	2.000	.000	.000	LREF	474.8000	INCHES
.000	2.000	.000	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - YAW, N(YM)

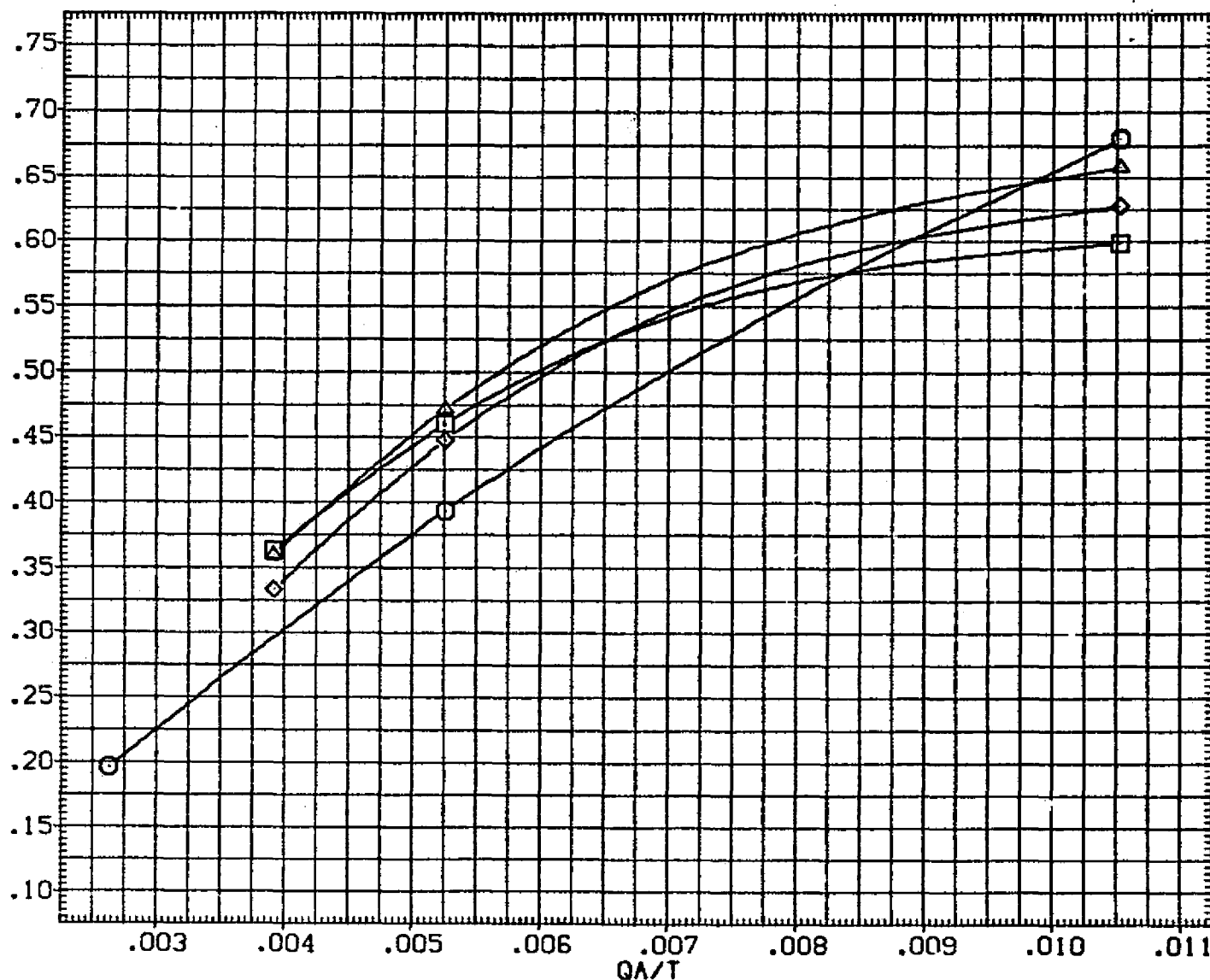


FIGURE 94. AREA RATIO EFFECTS, R/H UP FIRING JETS
(G) ALPHA = 4.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA075)	QIN32 LARC CFHT 118 (MA-22)
(SJA076)	QIN36 LARC CFHT 118 (MA-22)
(SJA077)	QIN48 LARC CFHT 118 (MA-22)
(SJA078)	QIN44 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BD FLAP	BETA	REFERENCE INFORMATION		
.000	2.000	.000	.000	SREF	2690.0000	SO. T.
.000	2.000	.000	.000	LREF	474.8000	IN. HES
.000	2.000	.000	.000	BREF	936.6800	IN. HES
.000	2.000	.000	.000	XMRP	1076.7800	IN. XO
				YMRP	.0000	IN. YO
				ZMRP	375.0000	IN. ZO
				SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - YAW, N(YM)

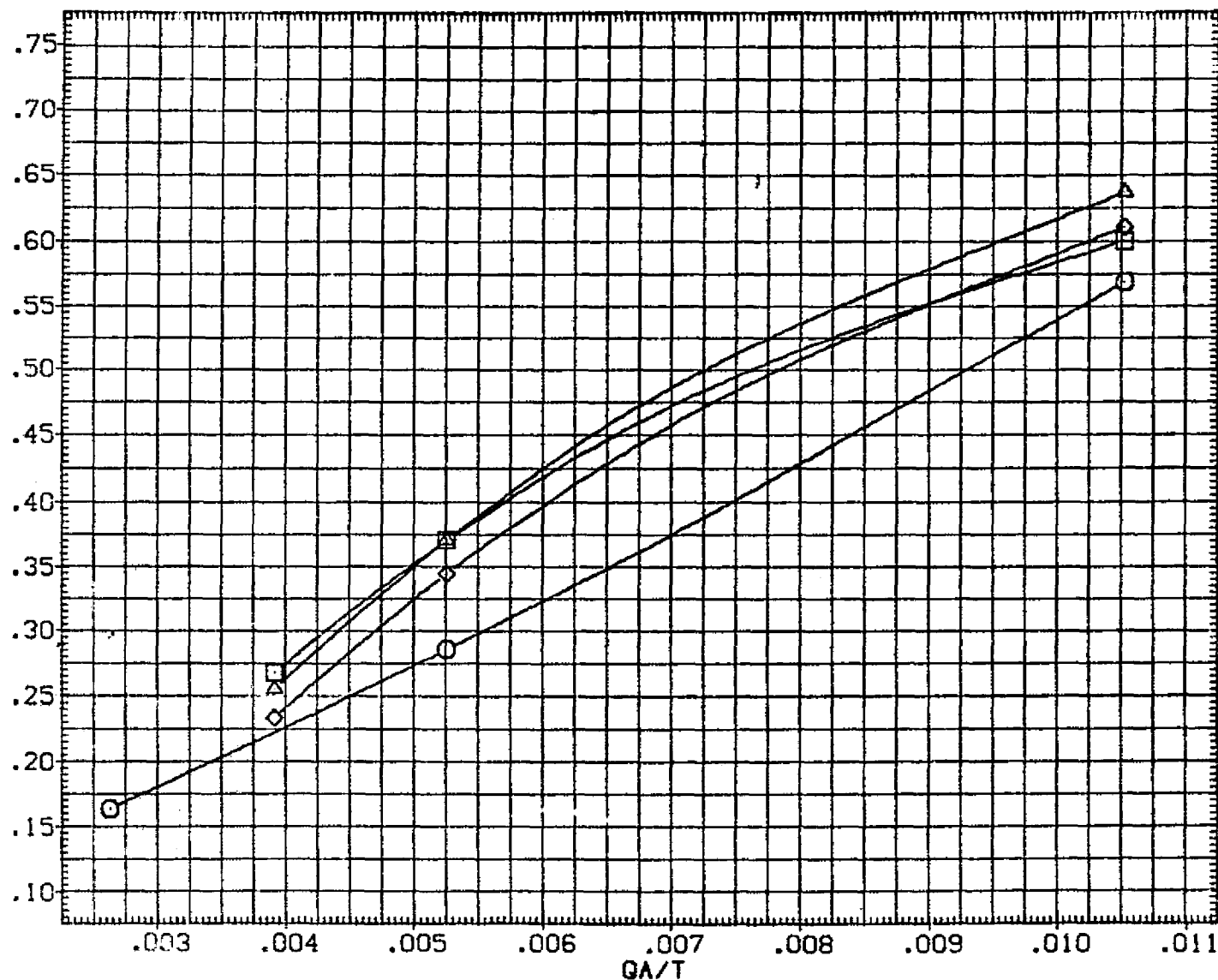


FIGURE 94. AREA RATIO EFFECTS, R/H UP FIRING JETS
(H) ALPHA = 6.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA075)	01N32 LARC CFHT 118 (MA-22)
(SJA076)	01N36 LARC CFHT 118 (MA-22)
(SJA077)	01N48 LARC CFHT 118 (MA-22)
(SJA078)	01N44 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BOFLAP	BETA
.000	2.000	.000	.000
.000	2.000	.000	.000
.000	2.000	.000	.000
.000	2.000	.000	.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ. FT.
LREF	474.8000	INCHES
BREF	936.6800	INCHES
XMRP	1076.7000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - YAW, N(YM)

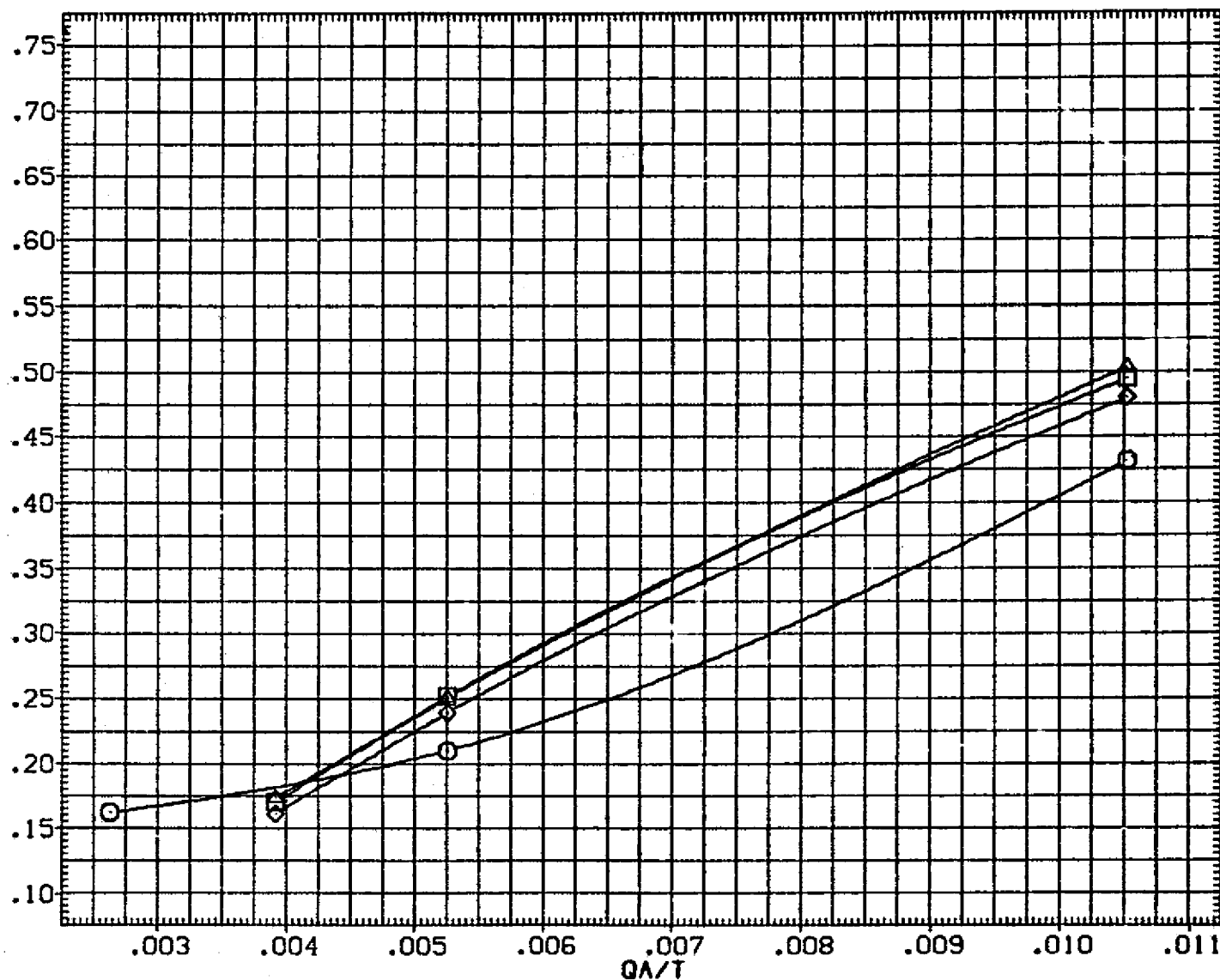


FIGURE 94. AREA RATIO EFFECTS, R/H UP FIRING JETS
(I) ALPHA = 8.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA075)	01N32 LARC CFHT 118 (MA-22)
(SJA076)	01N36 LARC CFHT 118 (MA-22)
(SJA077)	01N48 LARC CFHT 118 (MA-22)
(SJA078)	01N44 LARC CFHT 118 (MA-22)

ELEVON	NO.JET	BOFLAP	BETA	REFERENCE INFORMATION
.000	2.000	.000	.000	SREF 2690.0000 SQ. FT.
.000	2.000	.000	.000	LREF 474.8000 INCHES
.000	2.000	.000	.000	BREF 926.6500 INCHES
.000	2.000	.000	.000	XMRP 1076.7000 IN. X0
				YMRP .0000 IN. Y0
				ZMRP 375.0000 IN. Z0
				SCALE .0100

RCS JET AMPLIFICATION FACTOR - YAW, NCYM)

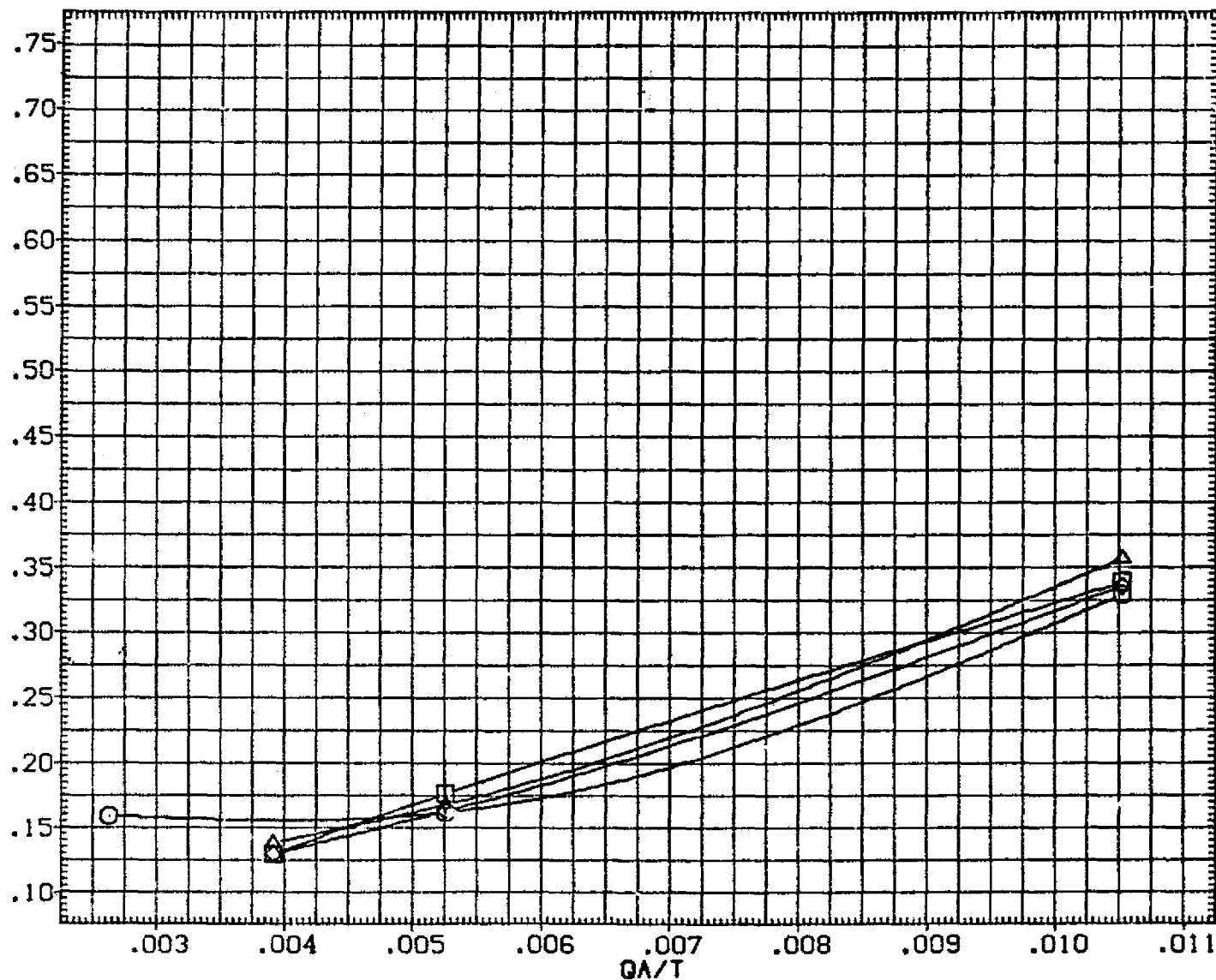


FIGURE 94. AREA RATIO EFFECTS, R/H UP FIRING JETS
(J)ALPHA = 10.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA075)	□ 01N32 LARC CFHT 118 (MA-22)
(SJA076)	□ 01N36 LARC CFHT 118 (MA-22)
(SJA077)	◇ 01N48 LARC CFHT 118 (MA-22)
(SJA078)	△ 01N44 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	SDFLAP	BETA	REFERENCE INFORMATION		
.000	2.000	.000	.000	SREF	2690.0000	50. FT.
.000	2.000	.000	.000	LREF	474.8000	INCHES
.000	2.000	.000	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - YAW. N(°)

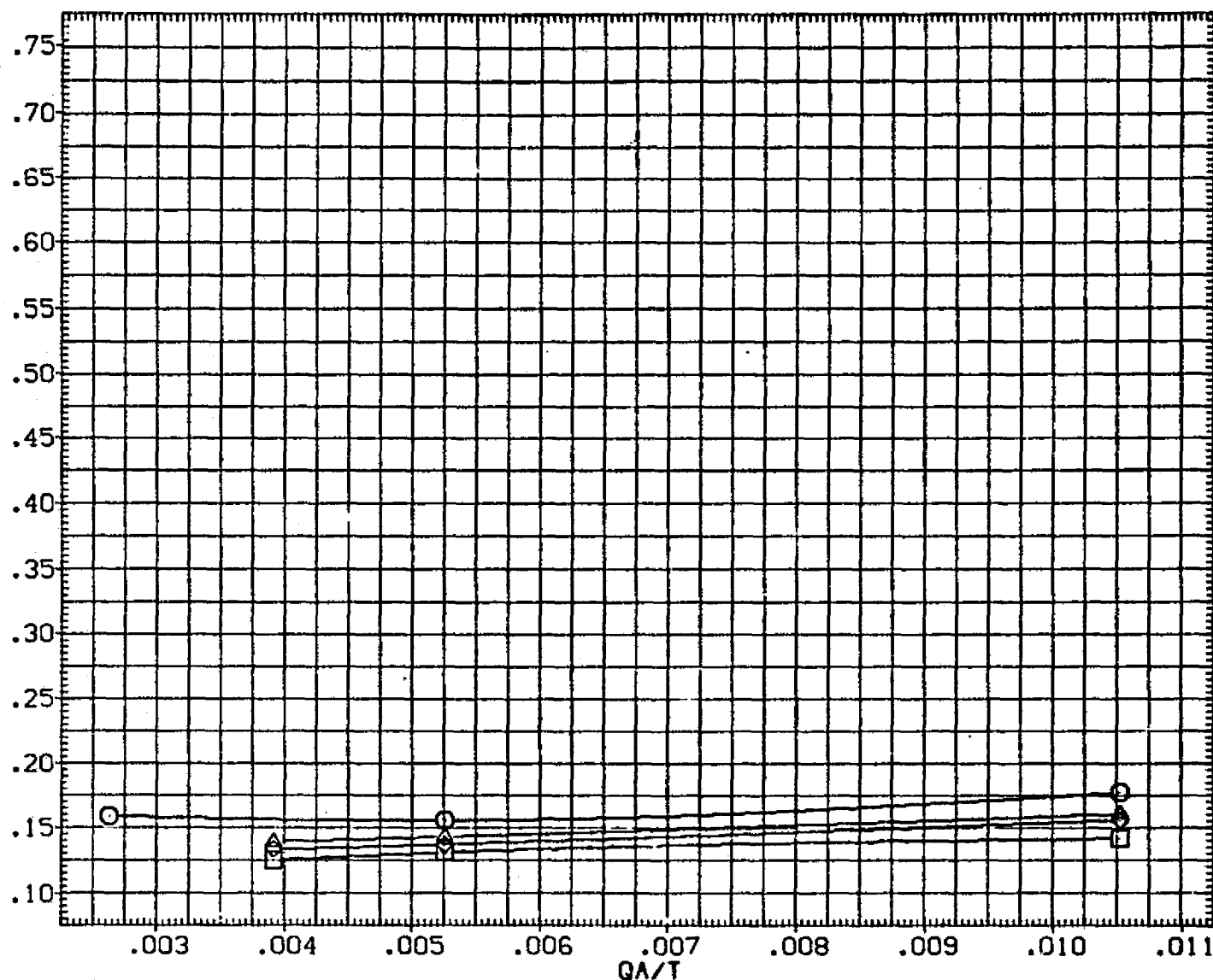


FIGURE 94. AREA RATIO EFFECTS, R/H UP FIRING JETS
(K) ALPHA = 15.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA075)	01N32 LARC CFHT 118 (MA-22)
(SJA076)	01N36 LARC CFHT 118 (MA-22)
(SJA077)	01N49 LARC CFHT 118 (MA-22)
(SJA078)	01N44 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BD FLAP	BETA	REFERENCE INFORMATION		
.000	2.000	.000	.000	SREF	2690.0000	50. FT.
.000	2.000	.000	.000	LREF	471.8000	INCHES
.000	2.000	.000	.000	BREF	836.6800	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - YAW, N(YM)

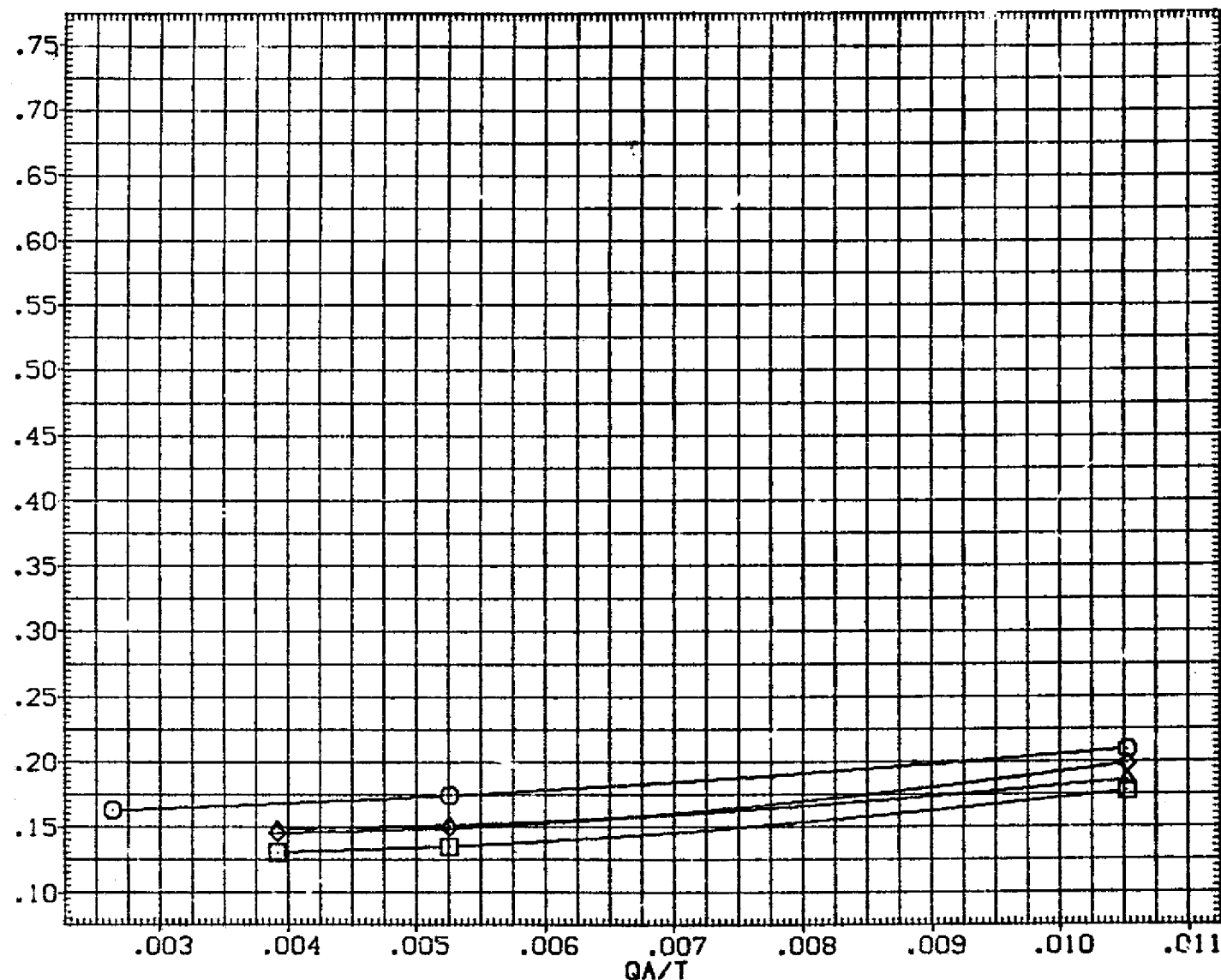


FIGURE 94. AREA RATIO EFFECTS, R/H UP FIRING JETS
(L) ALPHA = 20.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA075)	01N32 LARC CFHT 118 (MA-22)
(SJA076)	01N36 LARC CFHT 118 (MA-22)
(SJA077)	01N48 LARC CFHT 118 (MA-22)
(SJA078)	01N44 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BOFLAP	BETA	REFERENCE INFORMATION
.000	2.000	.000	.000	SREF 2690.0000 SQ. FT.
.000	2.000	.000	.000	LREF 474.8000 INCHES
.000	2.000	.000	.000	BREF 936.6800 INCHES
.000	2.000	.000	.000	XMRP 1076.7000 IN. X0
				YMRP .0000 IN. Y0
				ZMRP 375.0000 IN. Z0
				SCALE .0100

RCS JET AMPLIFICATION FACTOR - YAW, NCYM

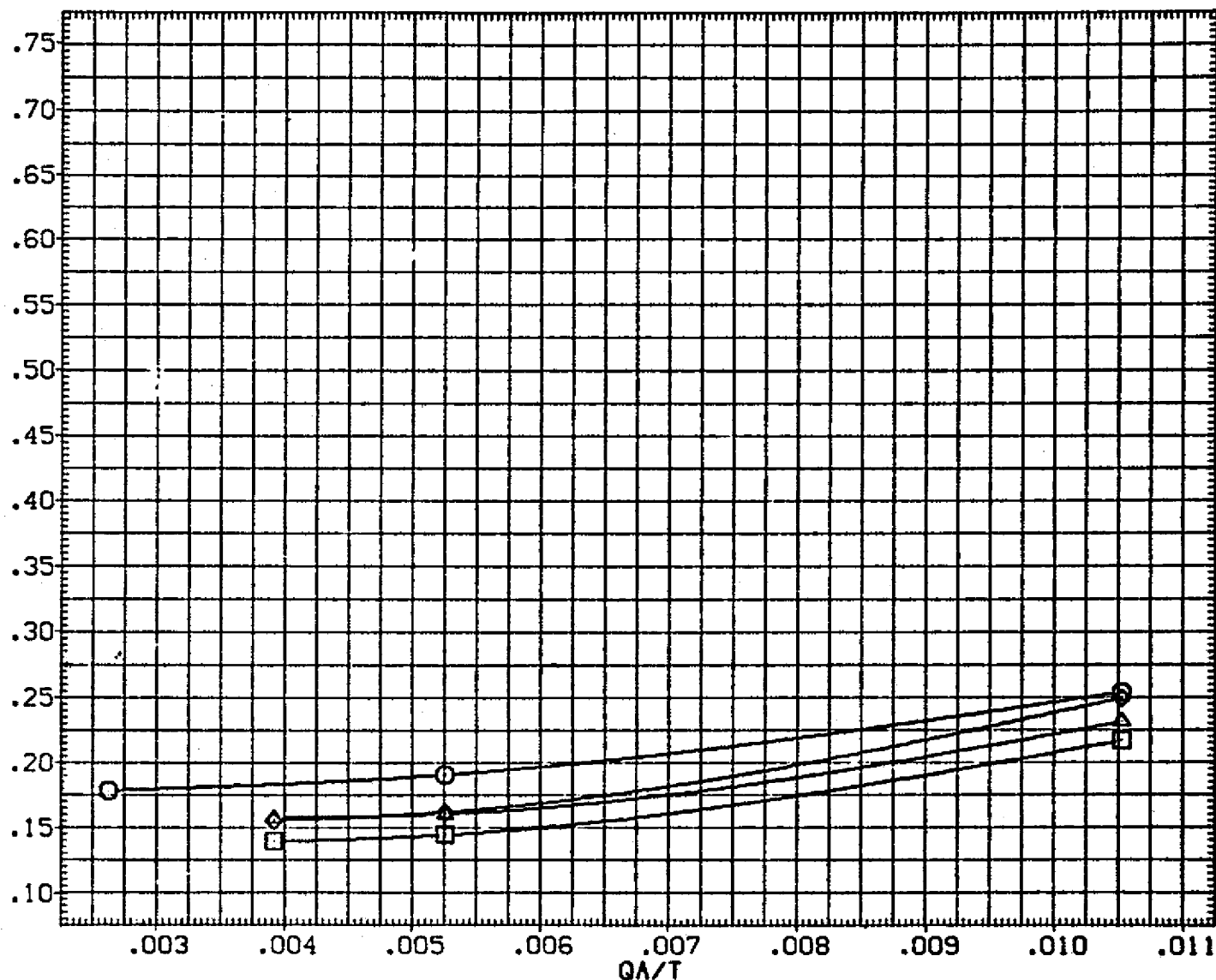


FIGURE 94. AREA RATIO EFFECTS, R/H UP FIRING JETS
(M)ALPHA = 25.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA075)	Q1N32 LARC CFHT 118 (MA-22)
(SJA076)	Q1N36 LARC CFHT 118 (MA-22)
(SJA077)	Q1N48 LARC CFHT 118 (MA-22)
(SJA078)	Q1N44 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BOFLAP	BETA	REFERENCE INFORMATION
.000	2.000	.000	.000	SREF 2690.0000 SQ. FT.
.000	2.000	.000	.000	LREF 474.8000 INCHES
.000	2.000	.000	.000	BREF 935.6800 INCHES
.000	2.000	.000	.000	XMRP 1076.7000 IN. X0
				YMRP .0000 IN. Y0
				ZMRP 375.0000 IN. Z0
				SCALE .0100

RCS JET AMPLIFICATION FACTOR - YAW, N(CYM)

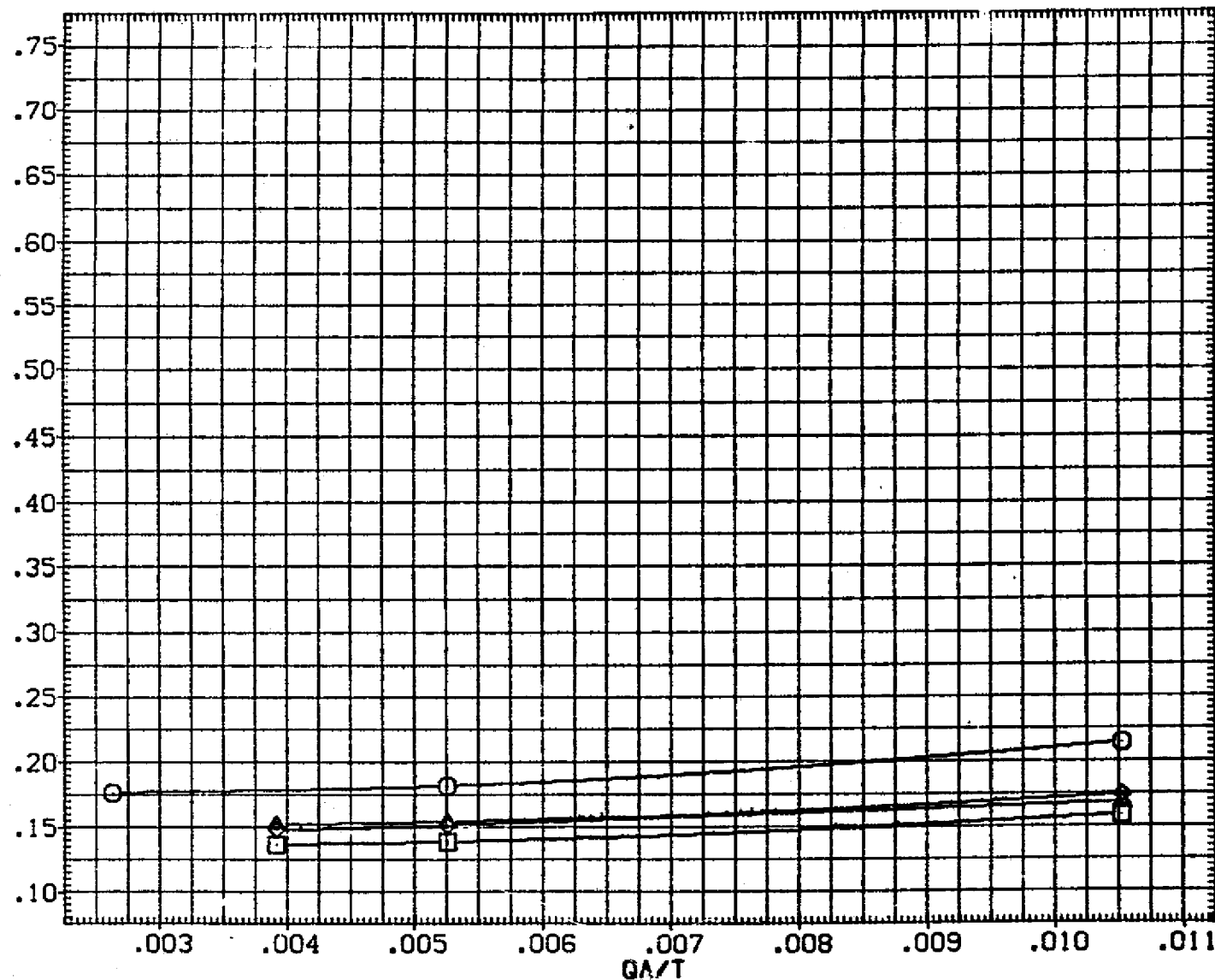


FIGURE 94. AREA RATIO EFFECTS, R/H UP FIRING JETS

(N)ALPHA = 30.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA075)	0IN32 LARC CFHT 118 (MA-22)
(SJA076)	0IN36 LARC CFHT 118 (MA-22)
(SJA077)	0IN48 LARC CFHT 118 (MA-22)
(SJA078)	0IN41 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BOFLAP	BETA	REFERENCE INFORMATION
.000	2.000	.000	.000	SREF 2690.0000 SQ. FT.
.000	2.000	.000	.000	LREF 474.8000 INCHES
.000	2.000	.000	.000	BREF 936.6800 INCHES
.000	2.000	.000	.000	XMRP 1076.7000 IN. X0
				YMRP .0000 IN. Y0
				ZMRP 375.0000 IN. Z0
				SCALE .0100

RCS JET AMPLIFICATION FACTOR - YAW, NCYM

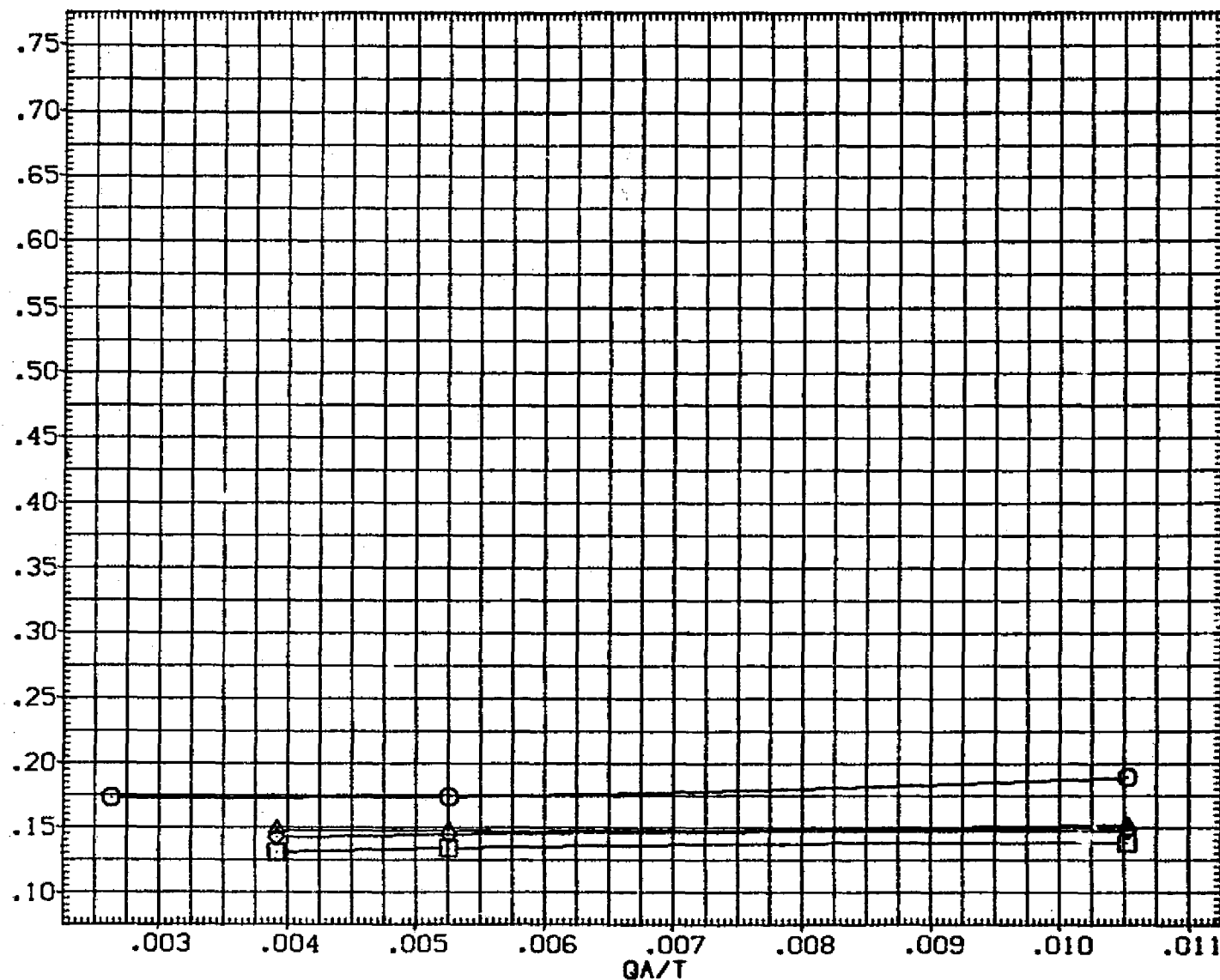


FIGURE 94. AREA RATIO EFFECTS, R/H UP FIRING JETS

(O) ALPHA = 35.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA075)	01N32 LARC CFHT 118 (MA-22)
(SJA076)	01N36 LARC CFHT 118 (MA-22)
(SJA077)	01N48 LARC CFHT 118 (MA-22)
(SJA078)	01N44 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BOFLAP	BETA	REFERENCE INFORMATION		
.000	2.000	.000	.000	SREF	2690.0000	50. FT.
.000	2.000	.000	.000	LREF	474.8000	INCHES
.000	2.000	.000	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - SIDE FORCE, NCSF)

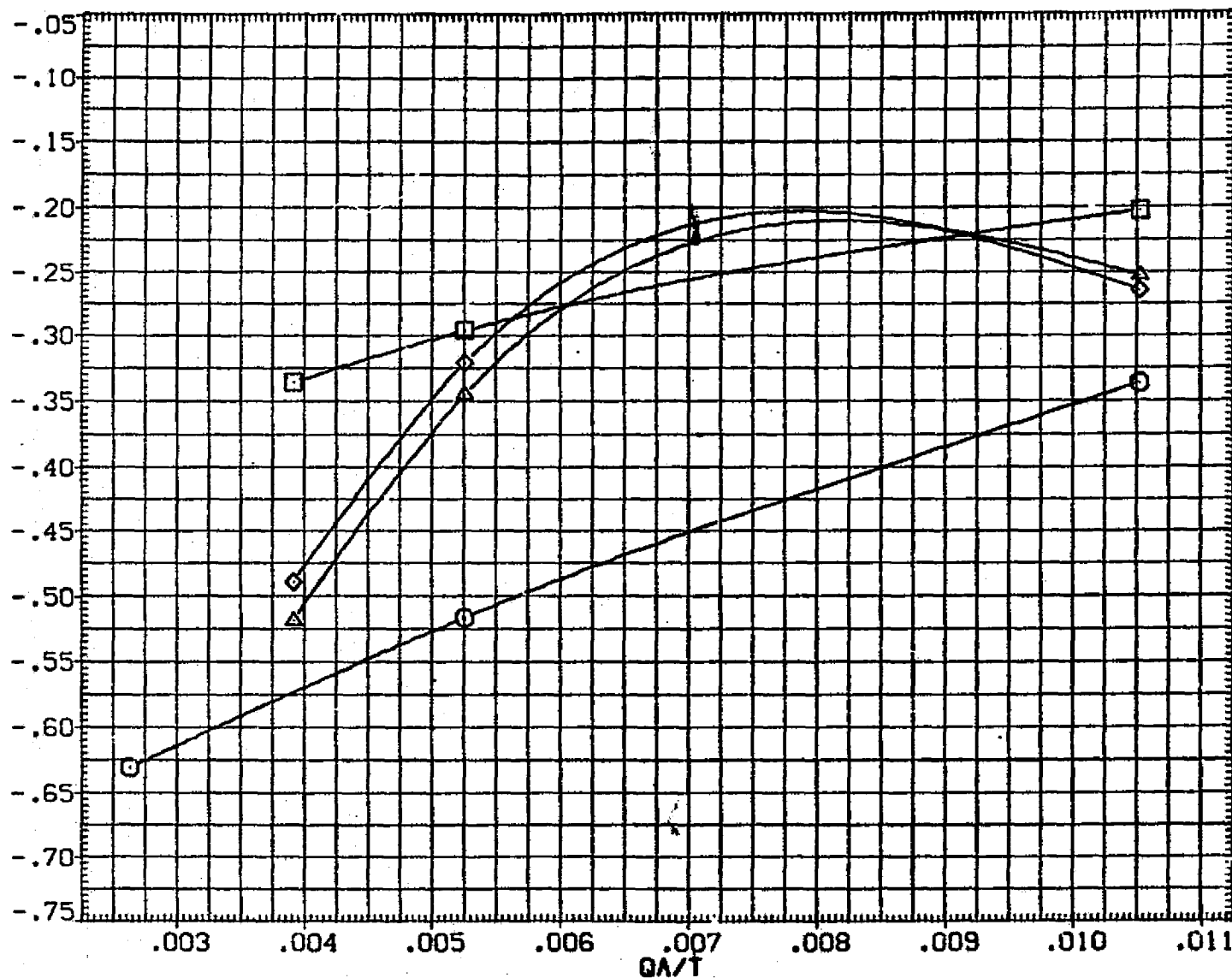


FIGURE 94. AREA RATIO EFFECTS, R/H UP FIRING JETS
(A) ALPHA = -8.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA075) □	01N32 LARC CFHT 118 (MA-22)
(SJA076) □	01N36 LARC CFHT 118 (MA-22)
(SJA077) ◇	01N48 LARC CFHT 118 (MA-22)
(SJA078) △	01N44 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BOFLAP	BETA	REFERENCE INFORMATION
.000	2.000	.000	.000	SREF 2690.0000 SQ. FT.
.000	2.000	.000	.000	LREF 474.8000 INCHES
.000	2.000	.000	.000	BREF 936.6800 INCHES
.000	2.000	.000	.000	XMRP 1076.7000 IN. X0
				YMRP .0000 IN. Y0
				ZMRP 375.0000 IN. Z0
				SCALE .0100

RCS JET AMPLIFICATION FACTOR - SIDE FORCE, N(SF)

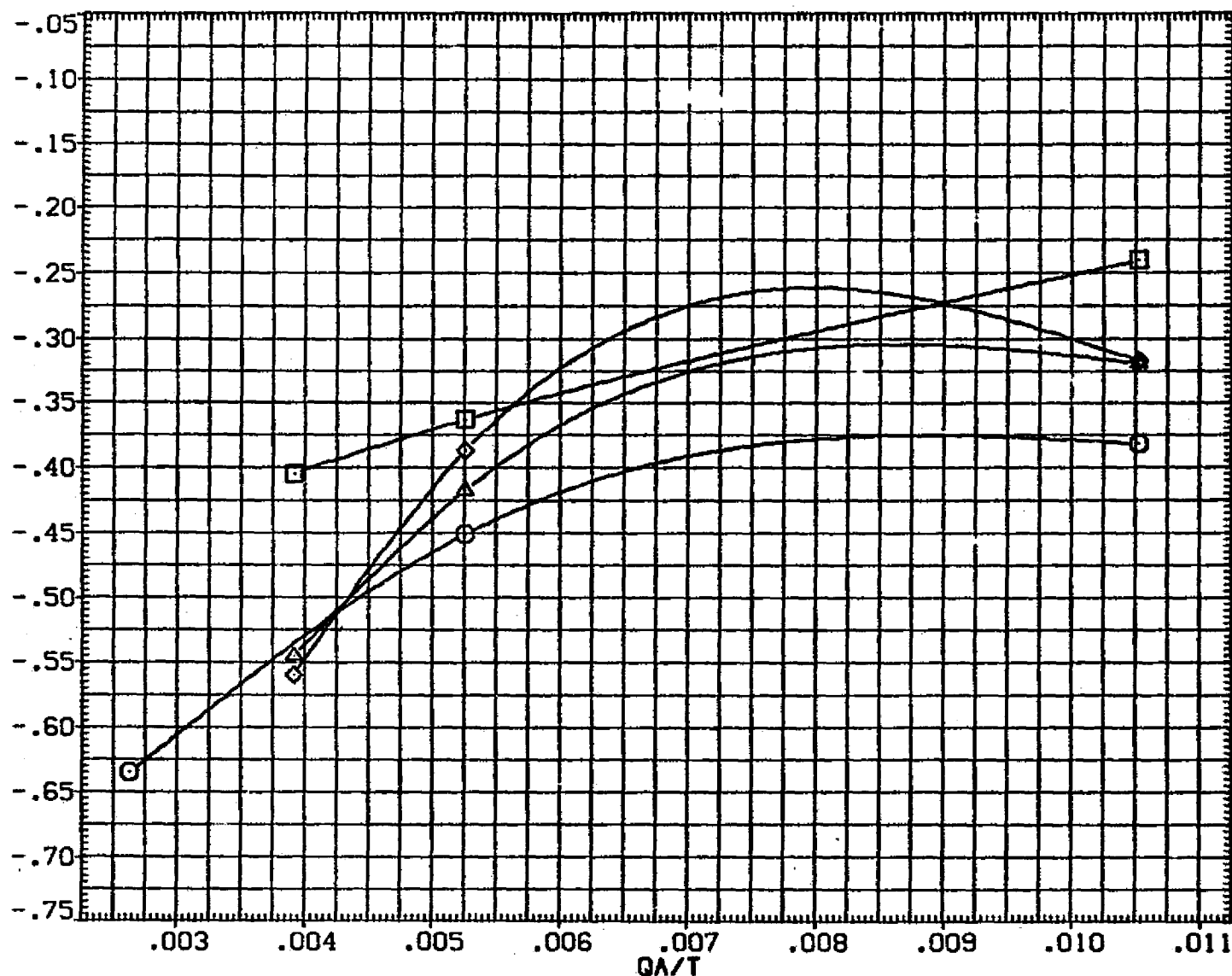


FIGURE 94. AREA RATIO EFFECTS, R/H UP FIRING JETS
(B) ALPHA = -6.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA075) □	01N32 LARC CFHT 118 (MA-22)
(SJA076) □	01N36 LARC CFHT 118 (MA-22)
(SJA077) △	01N48 LARC CFHT 118 (MA-22)
(SJA078) △	01N44 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BD FLAP	BETA	REFERENCE INFORMATION		
.000	2.000	.000	.000	SREF	2690.0000	50. FT.
.000	2.000	.000	.000	LREF	474.8000	INCHES
.000	2.000	.000	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XMHP	1076.7000	IN. X0
				YMHP	.0000	IN. Y0
				ZMHP	375.0000	IN. Z0
				SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - SIDE FORCE, N(SF)

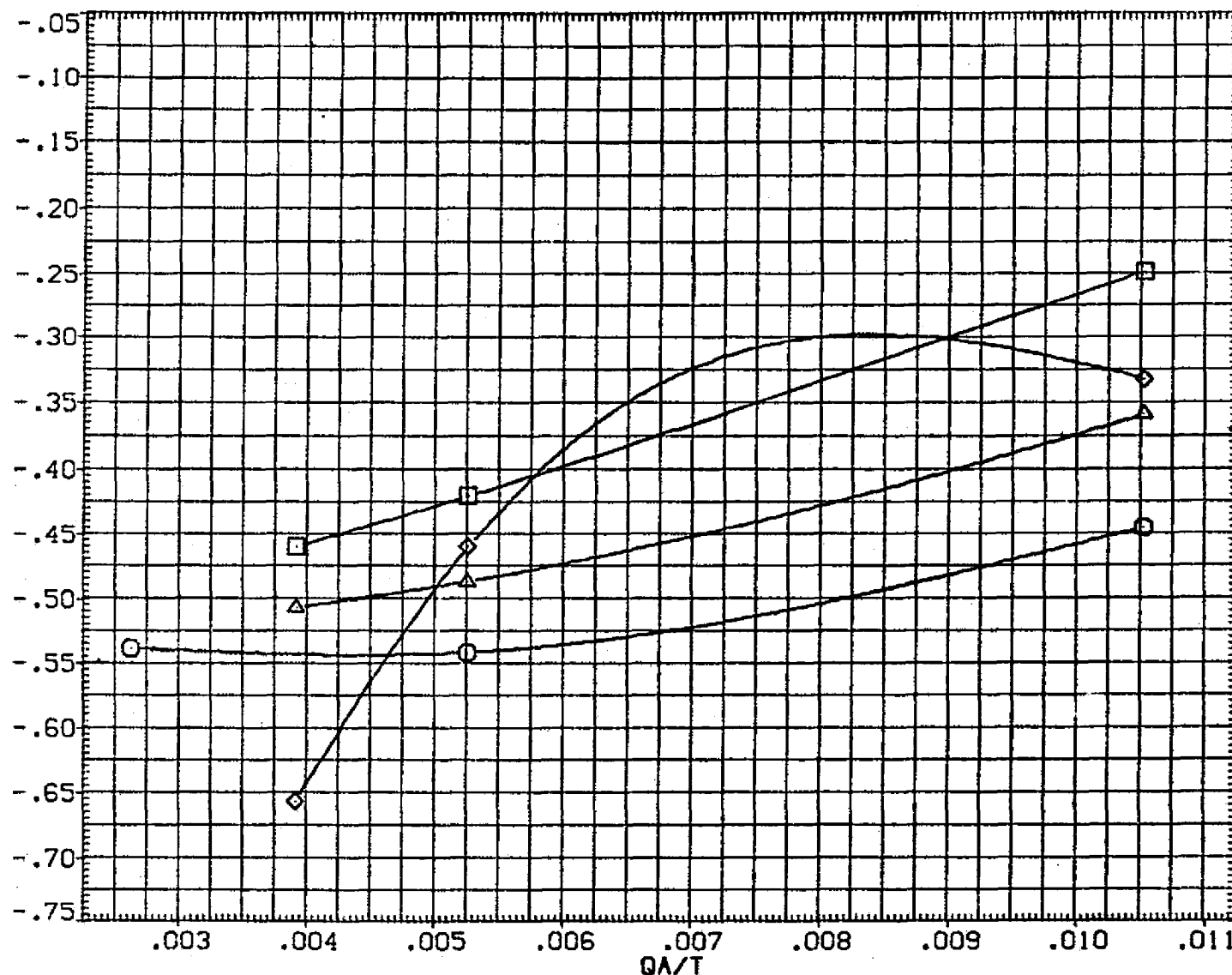


FIGURE 94. AREA RATIO EFFECTS, R/H UP FIRING JETS
(C) ALPHA = -4.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA075) □	01N32 LARC CFHT 118 (MA-22)
(SJA076) □	01N36 LARC CFHT 118 (MA-22)
(SJA077) ◇	01N48 LARC CFHT 118 (MA-22)
(SJA078) △	01N44 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BD FLAP	BETA	REFERENCE INFORMATION	
.000	2.000	.000	.000	SREF	2690.0000 SQ. FT.
.000	2.000	.000	.000	LREF	474.8000 INCHES
.000	2.000	.000	.000	BREF	936.6800 INCHES
.000	2.000	.000	.000	XMHP	1076.7000 IN. X0
				YMHP	.0000 IN. Y0
				ZMHP	375.0000 IN. Z0
				SCALE	.0100

RCS JET AMPLIFICATION FACTOR - SIDE FORCE, NCSF)

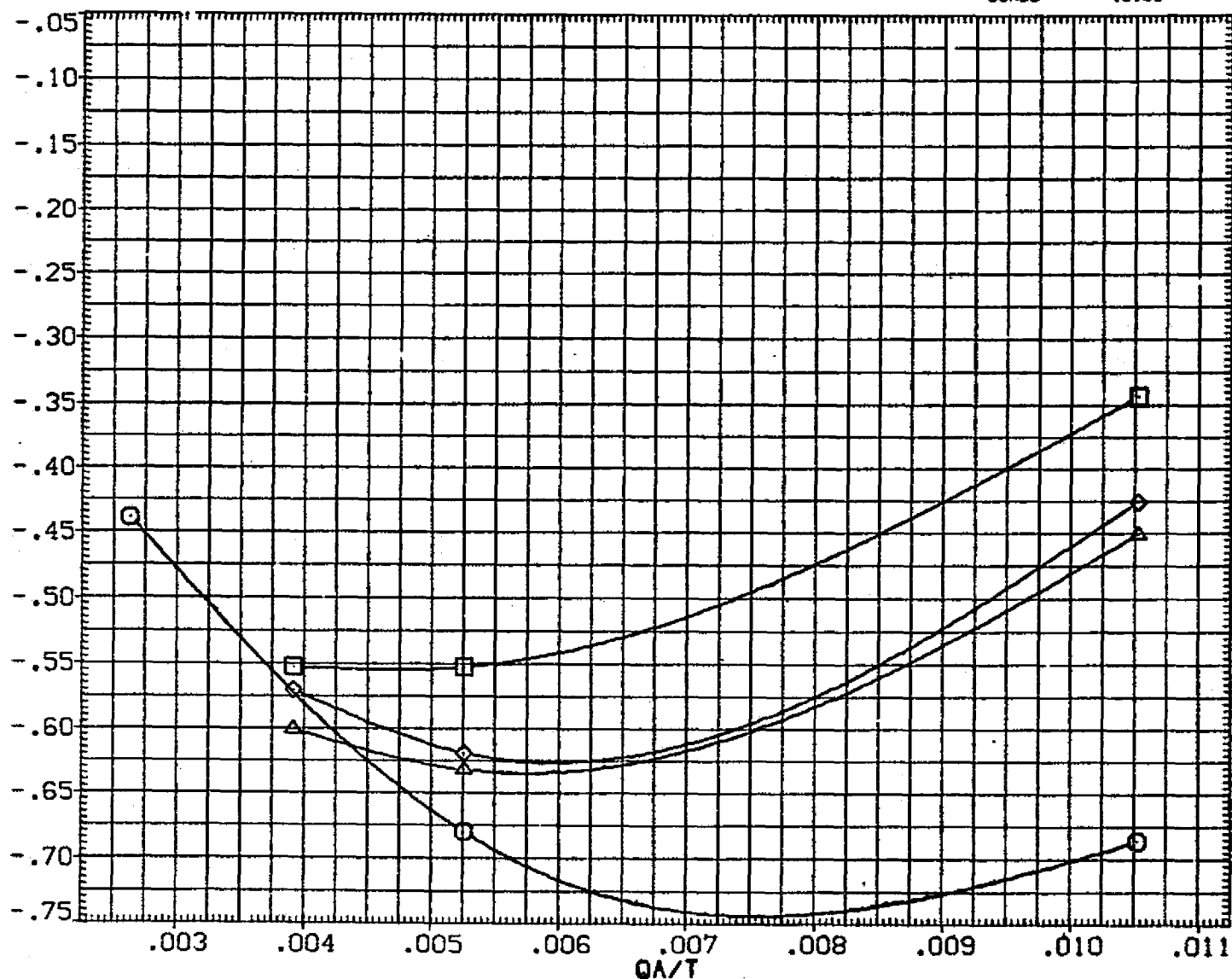


FIGURE 94. AREA RATIO EFFECTS, R/H UP FIRING JETS
(□) ALPHA = -2.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA075) □	01N32 LARC CFHT 118 (MA-22)
(SJA076) □	01N36 LARC CFHT 118 (MA-22)
(SJA077) △	01N48 LARC CFHT 118 (MA-22)
(SJA078) △	01N44 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BOFLAP	BETA	REFERENCE INFORMATION		
.000	2.000	.000	.000	SREF	2690.0000	SD. FT.
.000	2.000	.000	.000	LREF	474.8000	INCHES
.000	2.000	.000	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - SIDE FORCE, N(SF)

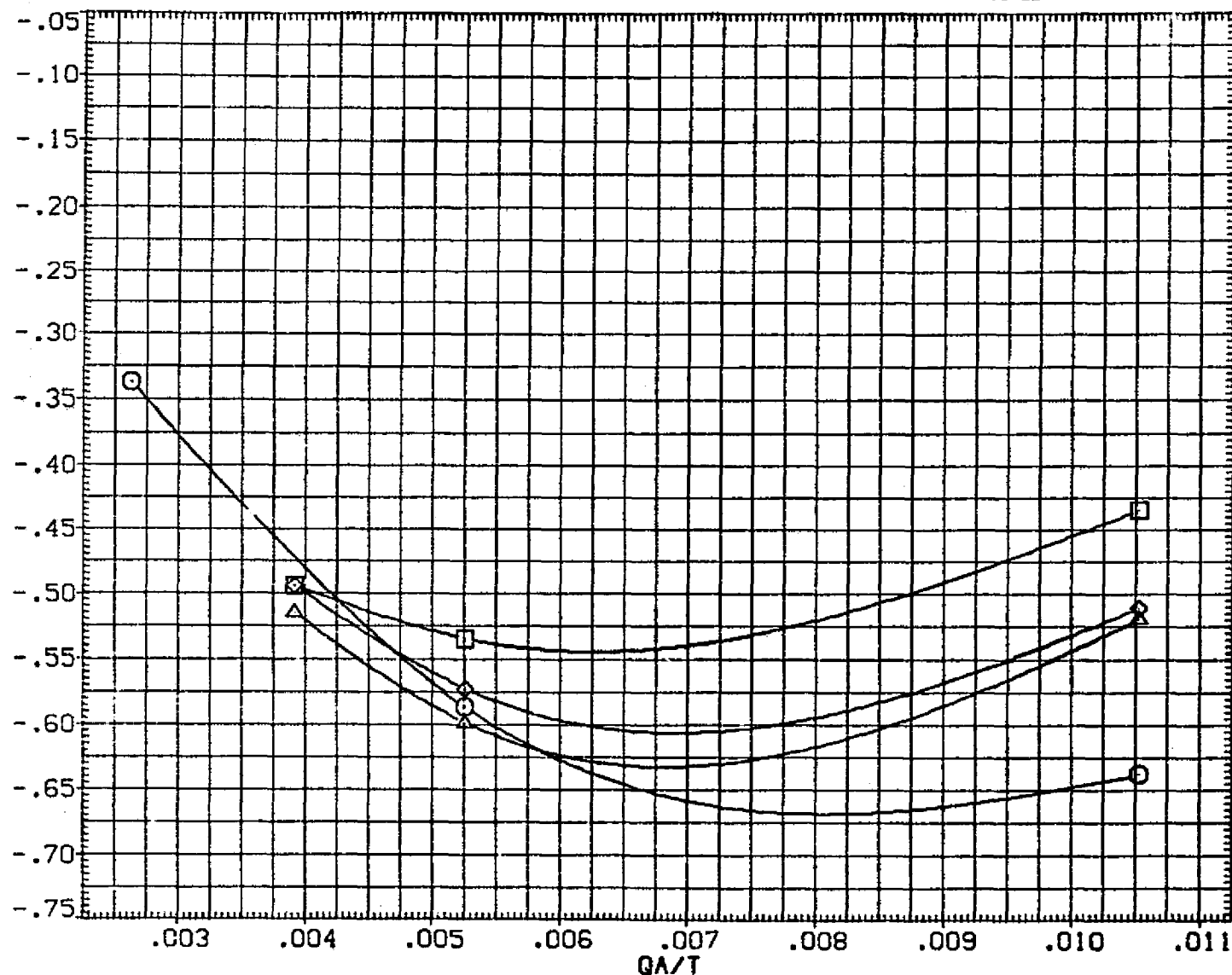


FIGURE 94. AREA RATIO EFFECTS, R/H UP FIRING JETS
(E) ALPHA = .00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA075) □	01N32 LARC CFHT 118 (MA-22)
(SJA076) □	01N36 LARC CFHT 118 (MA-22)
(SJA077) ◇	01N48 LARC CFHT 118 (MA-22)
(SJA078) △	01N44 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BOFLAP	BETA	REFERENCE INFORMATION		
.000	2.000	.000	.000	SREF	2690.0000	SO. FT.
.000	2.000	.000	.000	LREF	474.8000	INCHES
.000	2.000	.000	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - SIDE FORCE, N(SF)

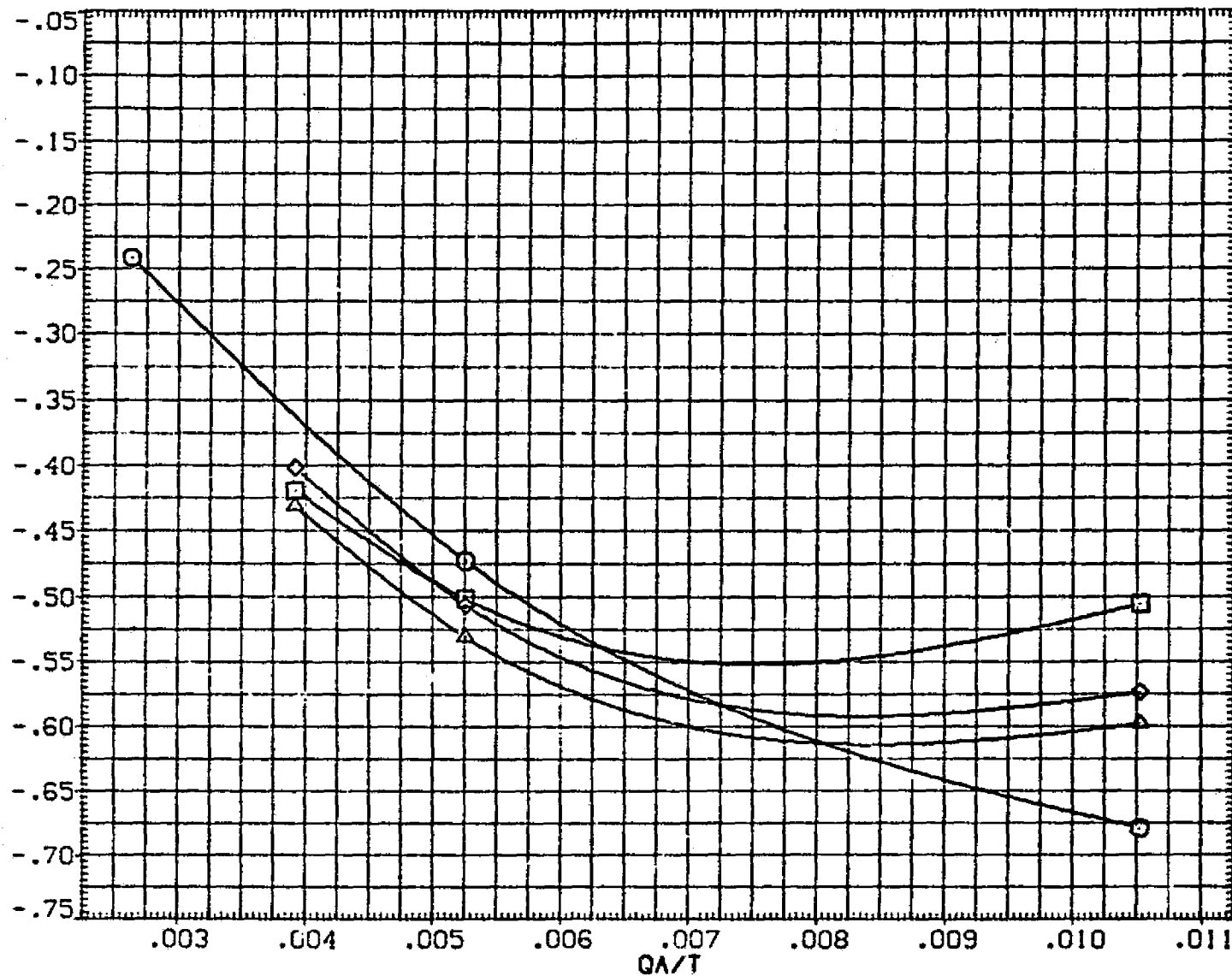


FIGURE 94. AREA RATIO EFFECTS, R/H UP FIRING JETS
(F)ALPHA = 2.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA075)	01N32 LARC CFHT 118 (MA-22)
(SJA076)	01N36 LARC CFHT 118 (MA-22)
(SJA077)	01N48 LARC CFHT 118 (MA-22)
(SJA078)	01N44 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BD FLAP	BETA	REFERENCE INFORMATION
.000	2.000	.000	.000	SREF 2690.0000 SQ. FT.
.000	2.000	.000	.000	LREF 474.8000 INCHES
.000	2.000	.000	.000	BREF 936.6800 INCHES
.000	2.000	.000	.000	XMRP 1076.7000 IN. X0
				YMRP .0000 IN. Y0
				ZMRP 375.0000 IN. Z0
				SCALE .0100

RCS JET AMPLIFICATION FACTOR - SIDE FORCE, N(SF)

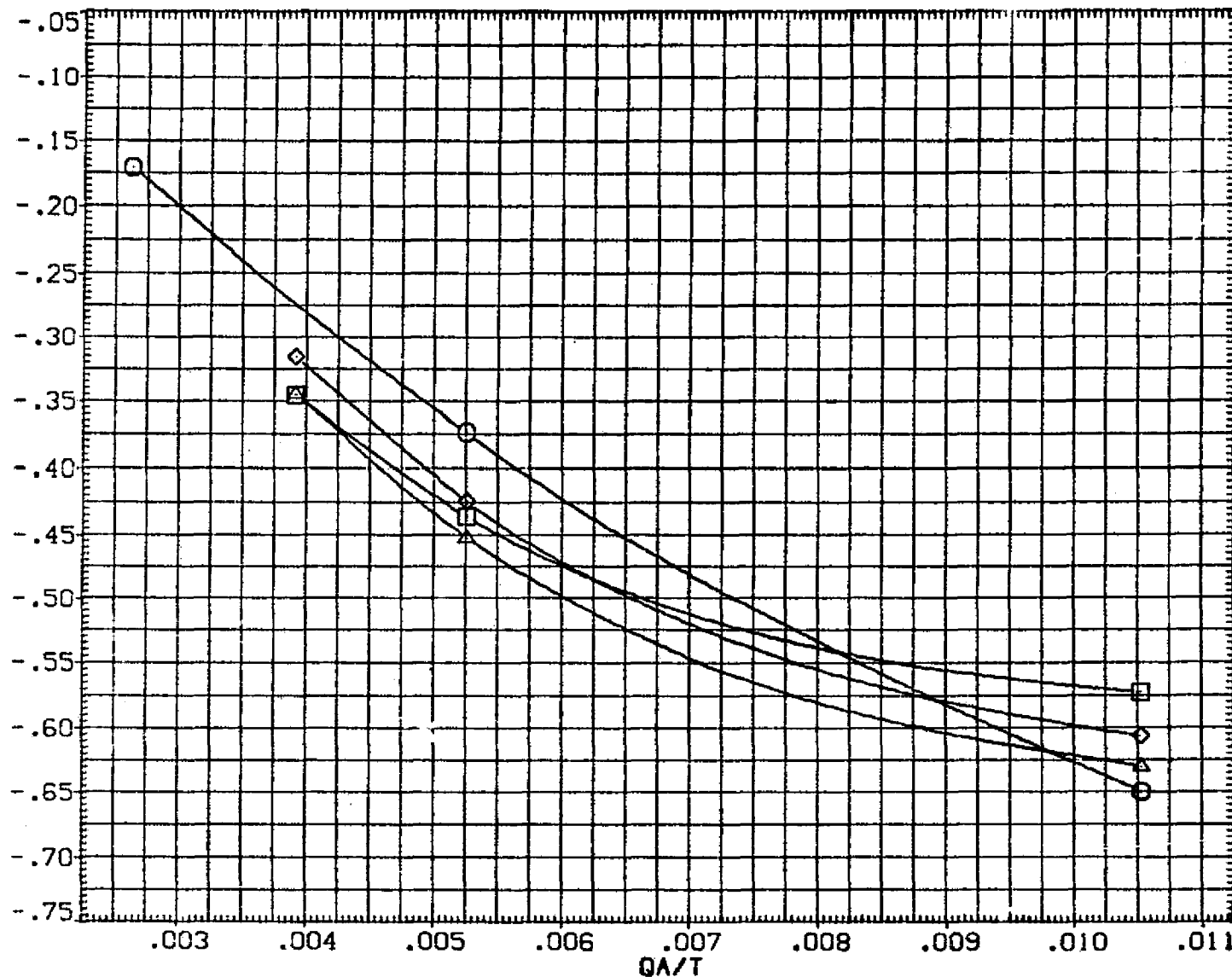


FIGURE 94. AREA RATIO EFFECTS, R/H UP FIRING JETS

(G) ALPHA = 4.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA075) ○	01N32 LARC CFHT 118 (MA-22)
(SJA076) □	01N36 LARC CFHT 118 (MA-22)
(SJA077) ◇	01N49 LARC CFHT 118 (MA-22)
(SJA078) △	01N44 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BOFLAP	BETA	REFERENCE INFORMATION	
.000	2.000	.000	.000	SREF	2690.0000 SQ. FT.
.000	2.000	.000	.000	LREF	474.8000 INCHES
.000	2.000	.000	.000	BREF	936.6800 INCHES
.000	2.000	.000	.000	XMRP	1076.7000 IN. X0
				YMRP	.0000 IN. Y0
				ZMRP	375.0000 IN. Z0
				SCALE	.0100

RCS JET AMPLIFICATION FACTOR - SIDE FORCE, N(SF)

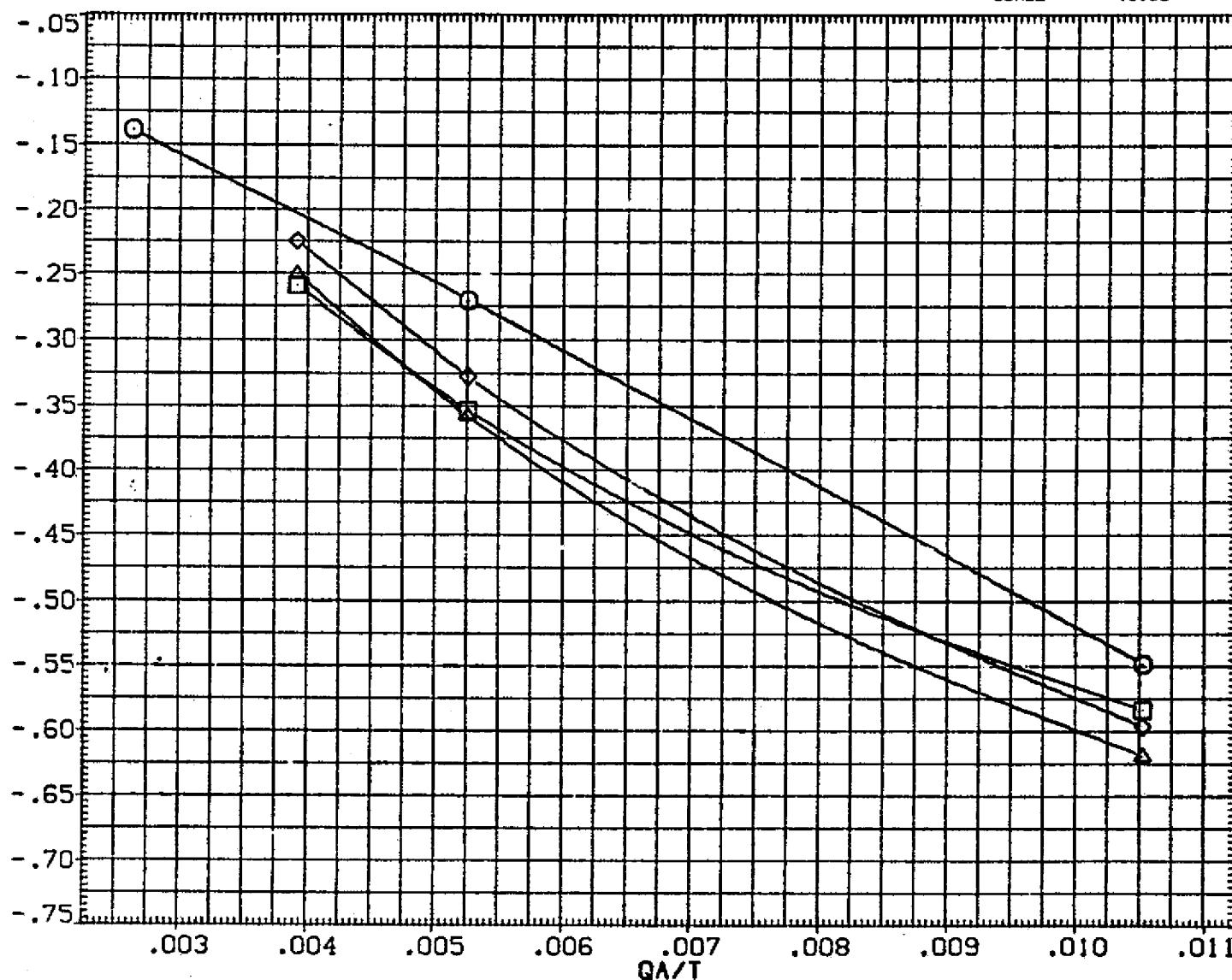


FIGURE 94. AREA RATIO EFFECTS, R/H UP FIRING JETS
(H) ALPHA = 6.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA075)	01N32 LARC CFHT 118 (MA-22)
(SJA076)	01N36 LARC CFHT 118 (MA-22)
(SJA077)	01N48 LARC CFHT 118 (MA-22)
(SJA078)	01N44 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	SDFLAP	BETA	REFERENCE INFORMATION	
.000	2.000	.000	.000	SREF	2690.0000 SQ. FT.
.000	2.000	.000	.000	LREF	474.8000 INCHES
.000	2.000	.000	.000	BREF	936.6800 INCHES
.000	2.000	.000	.000	XMRP	1076.7000 IN. X0
				YMRP	.0000 IN. Y0
				ZMRP	375.0000 IN. Z0
				SCALE	.0100

RCS JET AMPLIFICATION FACTOR - SIDE FORCE, N(SF)

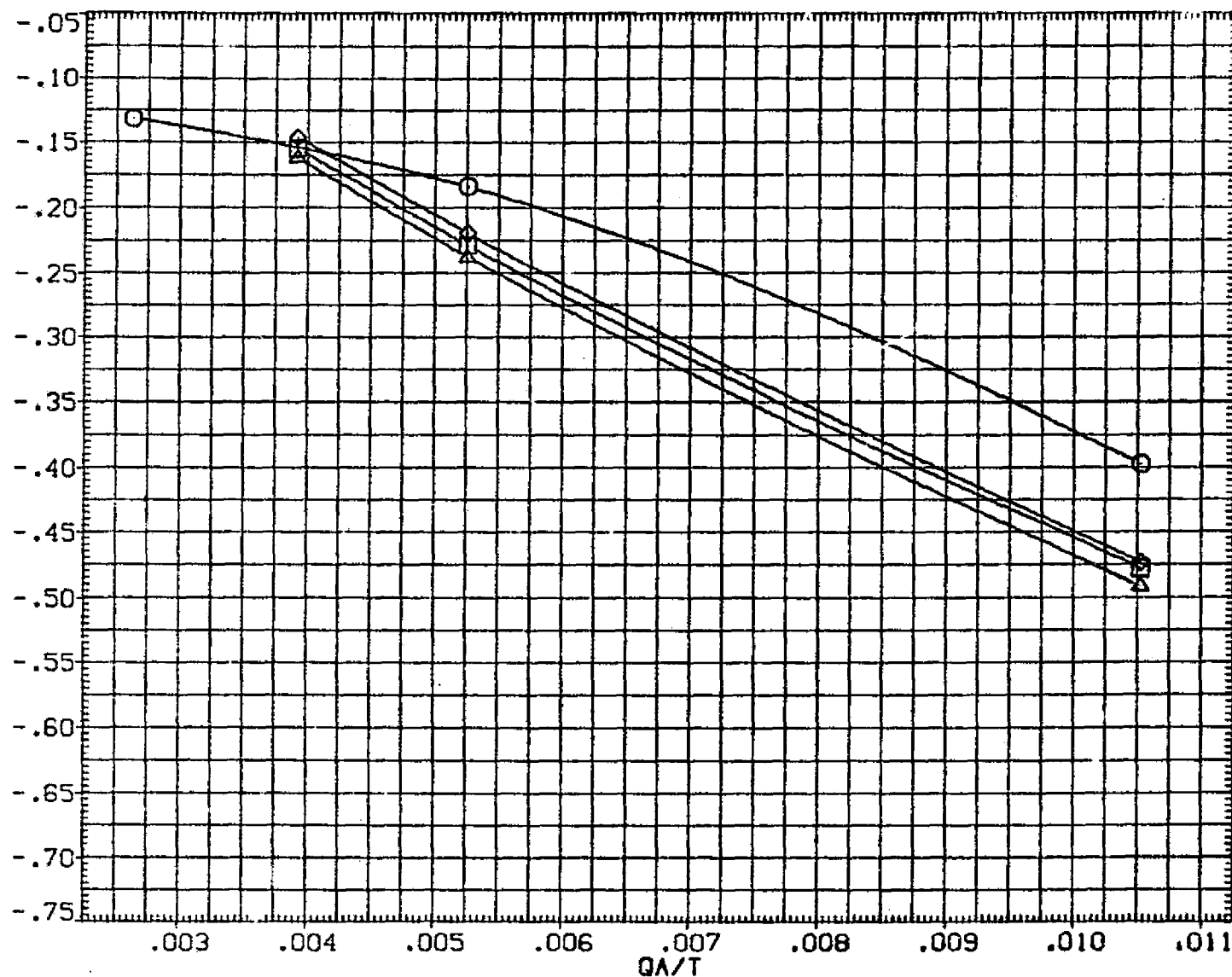


FIGURE 94. AREA RATIO EFFECTS, R/H UP FIRING JETS

(1) ALPHA = 8.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA075) □	01N32 LARC CFHT 118 (MA-22)
(SJA076) □	01N36 LARC CFHT 118 (MA-22)
(SJA077) ◇	01N48 LARC CFHT 118 (MA-22)
(SJA078) △	01N44 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BOFLAP	BETA	REFERENCE INFORMATION		
.000	2.000	.000	.000	SREF	2690.0000	SQ. FT.
.000	2.000	.000	.000	LREF	474.8000	INCHES
.000	2.000	.000	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - SIDE FORCE, N(SF)

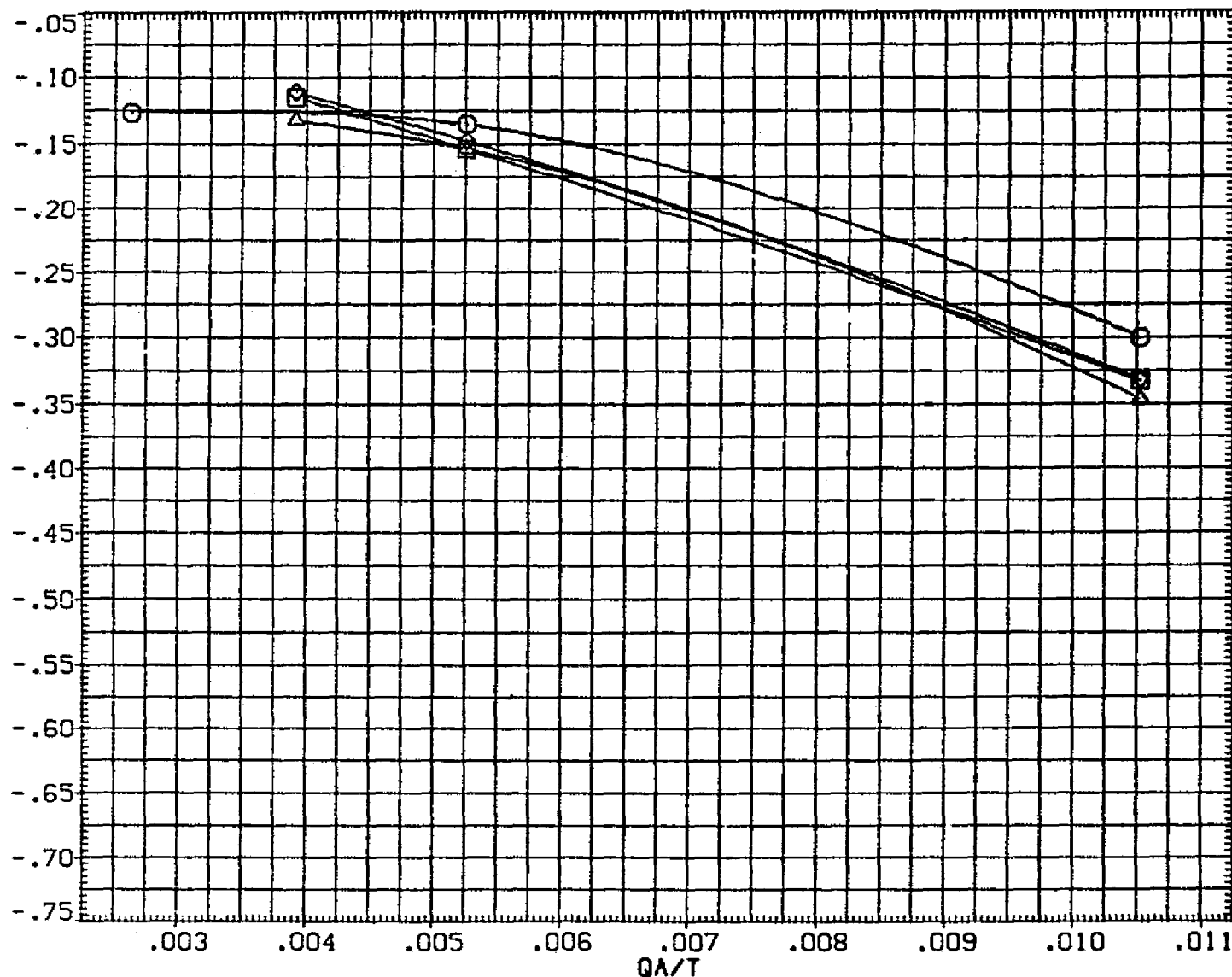


FIGURE 94. AREA RATIO EFFECTS, R/H UP FIRING JETS
(J) ALPHA = 10.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA075) □	01N32 LARC CFHT 118 (MA-22)
(SJA076) □	01N36 LARC CFHT 118 (MA-22)
(SJA077) X	01N48 LARC CFHT 118 (MA-22)
(SJA078) X	01N44 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BD FLAP	BETA	REFERENCE INFORMATION
.000	2.000	.000	.000	SREF 2690.0000 SQ. FT.
.000	2.000	.000	.000	LREF 474.8000 INCHES
.000	2.000	.000	.000	BREF 936.6800 INCHES
.000	2.000	.000	.000	XMRP 1076.7000 IN. X0
				YMRP .0000 IN. Y0
				ZMRP 375.0000 IN. Z0
				SCALE .0100

RCS JET AMPLIFICATION FACTOR - SIDE FORCE, (NSF)

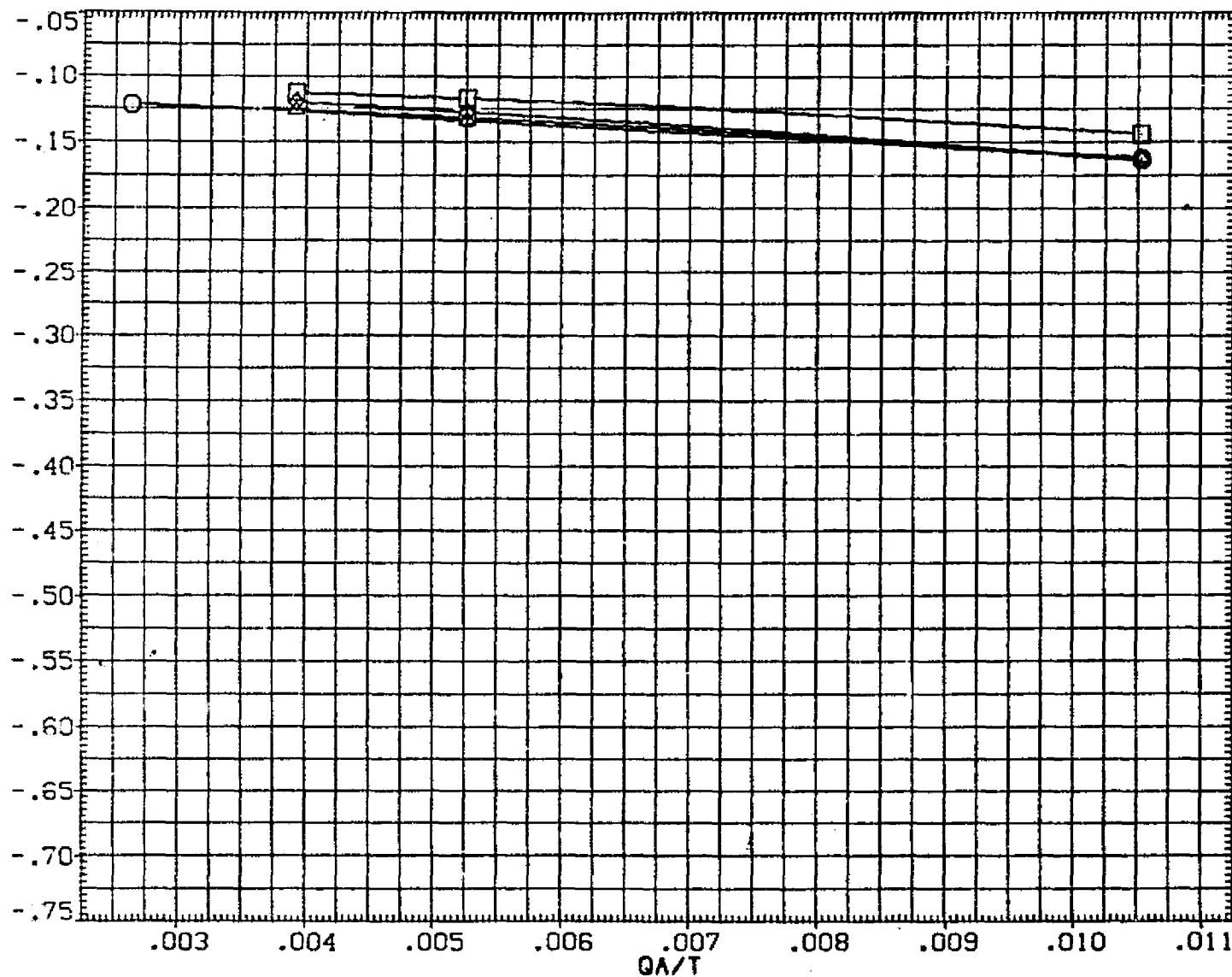


FIGURE 94. AREA RATIO EFFECTS, R/H UP FIRING JETS
(K) ALPHA = 15.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA075) □	01N32 LARC CFHT 118 (MA-22)
(SJA076) □	01N36 LARC CFHT 118 (MA-22)
(SJA077) △	01N48 LARC CFHT 118 (MA-22)
(SJA078) △	01N44 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BOFLAP	BETA	REFERENCE INFORMATION		
.000	2.000	.000	.000	SREF	2690.0000	SQ. FT.
.000	2.000	.000	.000	LREF	474.8000	INCHES
.000	2.000	.000	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.0100	

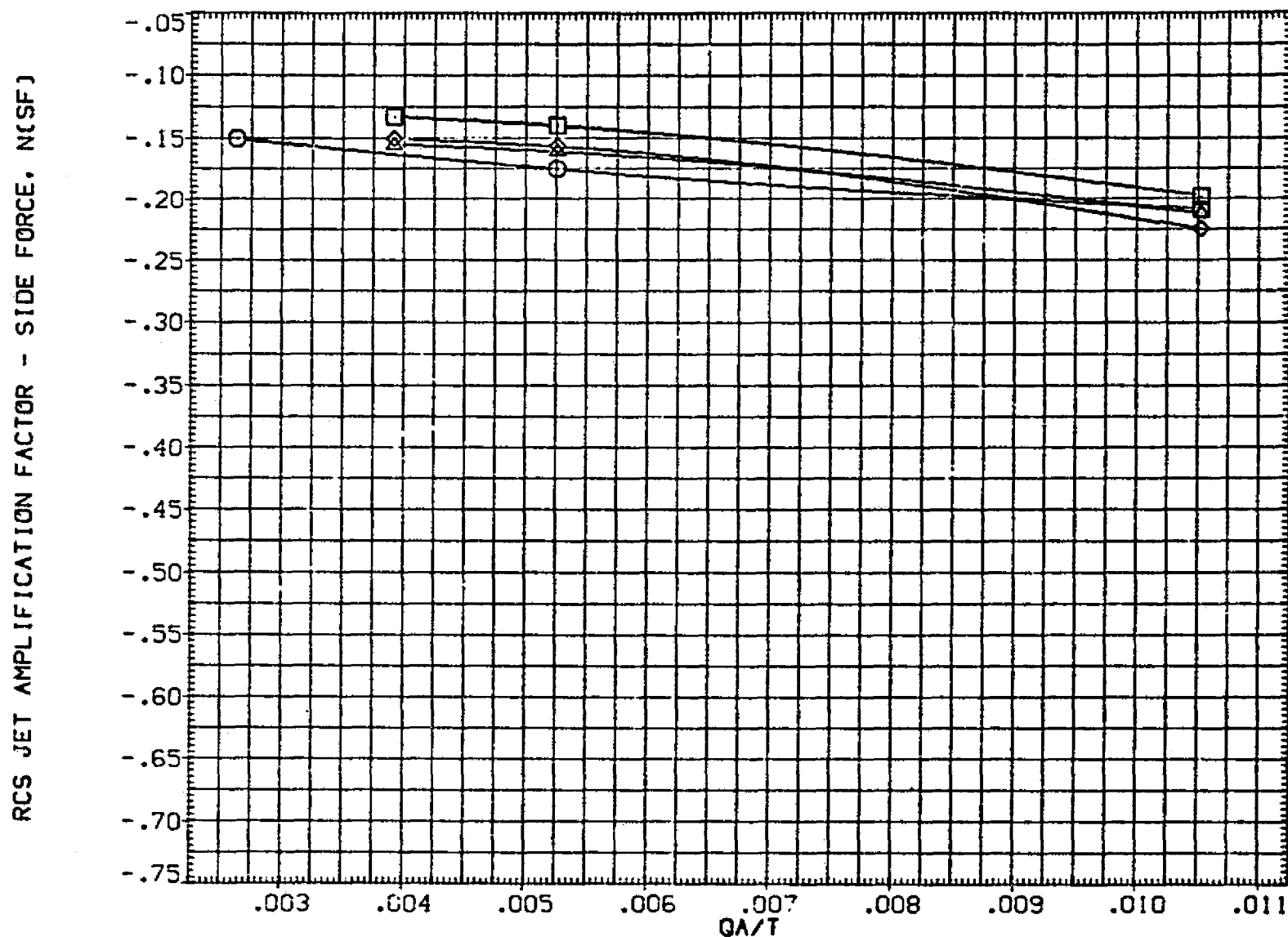


FIGURE 94. AREA RATIO EFFECTS, R/H UP FIRING JETS

(L) ALPHA = 20.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA075)	01N32 LARC CFHT 118 (MA-22)
(SJA076)	01N36 LARC CFHT 118 (MA-22)
(SJA077)	01N48 LARC CFHT 118 (MA-22)
(SJA078)	01N44 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BOFLAP	BETA	REFERENCE INFORMATION
.000	2.000	.000	.000	SREF 2690.0000 SQ. FT.
.000	2.000	.000	.000	LREF 474.8000 INCHES
.000	2.000	.000	.000	BREF 936.6800 INCHES
.000	2.000	.000	.000	XMRP 1076.7000 IN. X0
				YMRP .0000 IN. Y0
				ZMRP 375.0000 IN. Z0
				SCALE .0100

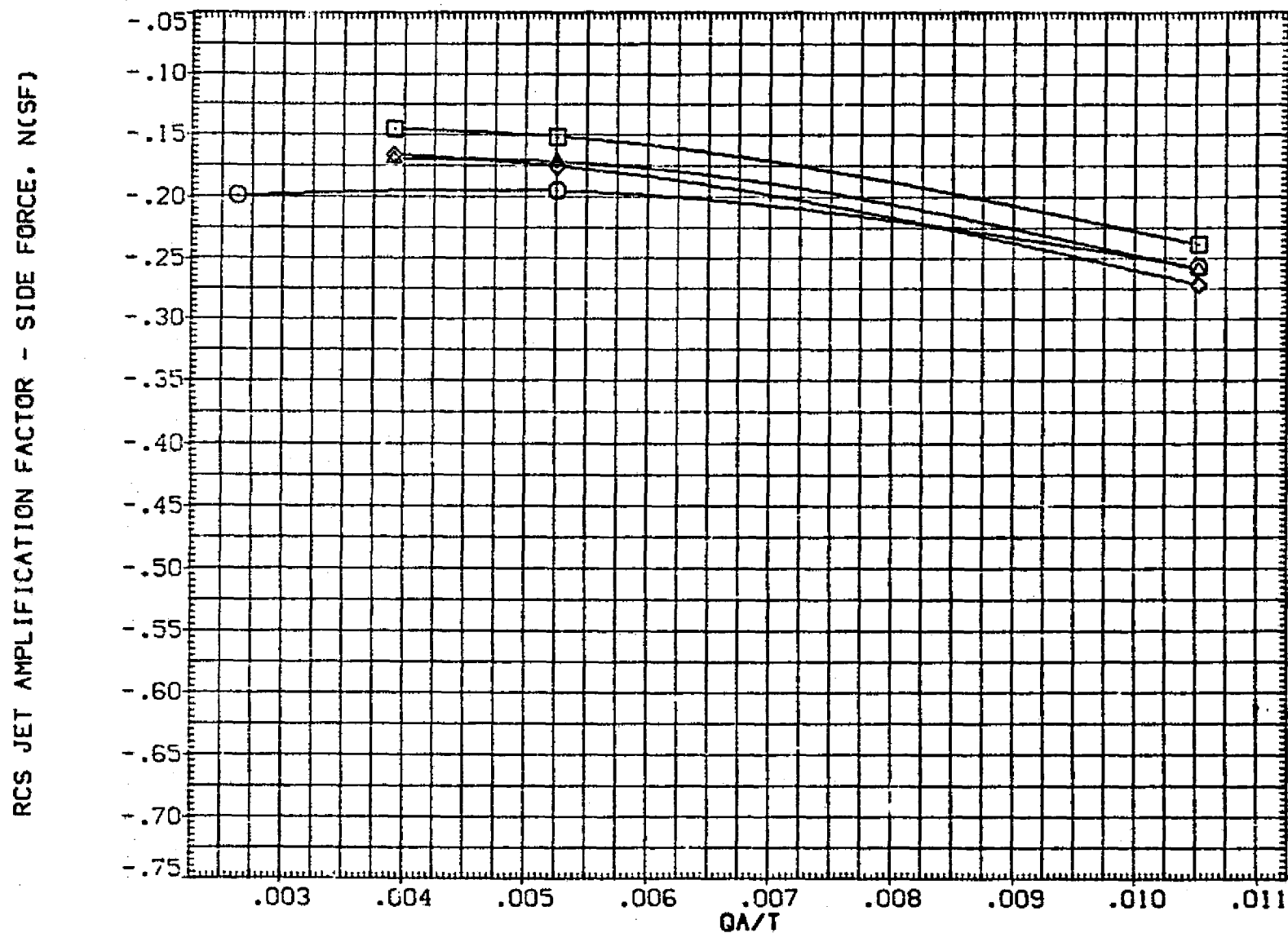


FIGURE 94. AREA RATIO EFFECTS, R/H UP FIRING JETS

(M)ALPHA = 25.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA075) □	01N32 LARC CFHT 118 (MA-22)
(SJA076) □	01N36 LARC CFHT 118 (MA-22)
(SJA077) ◇	01N48 LARC CFHT 118 (MA-22)
(SJA078) △	01N44 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BC/LAP	BETA	REFERENCE INFORMATION		
.000	2.000	.000	.000	SREF	2690.0000	SQ. FT.
.000	2.000	.000	.000	LREF	474.8000	INCHES
.000	2.000	.000	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - SIDE FORCE, N(SF)

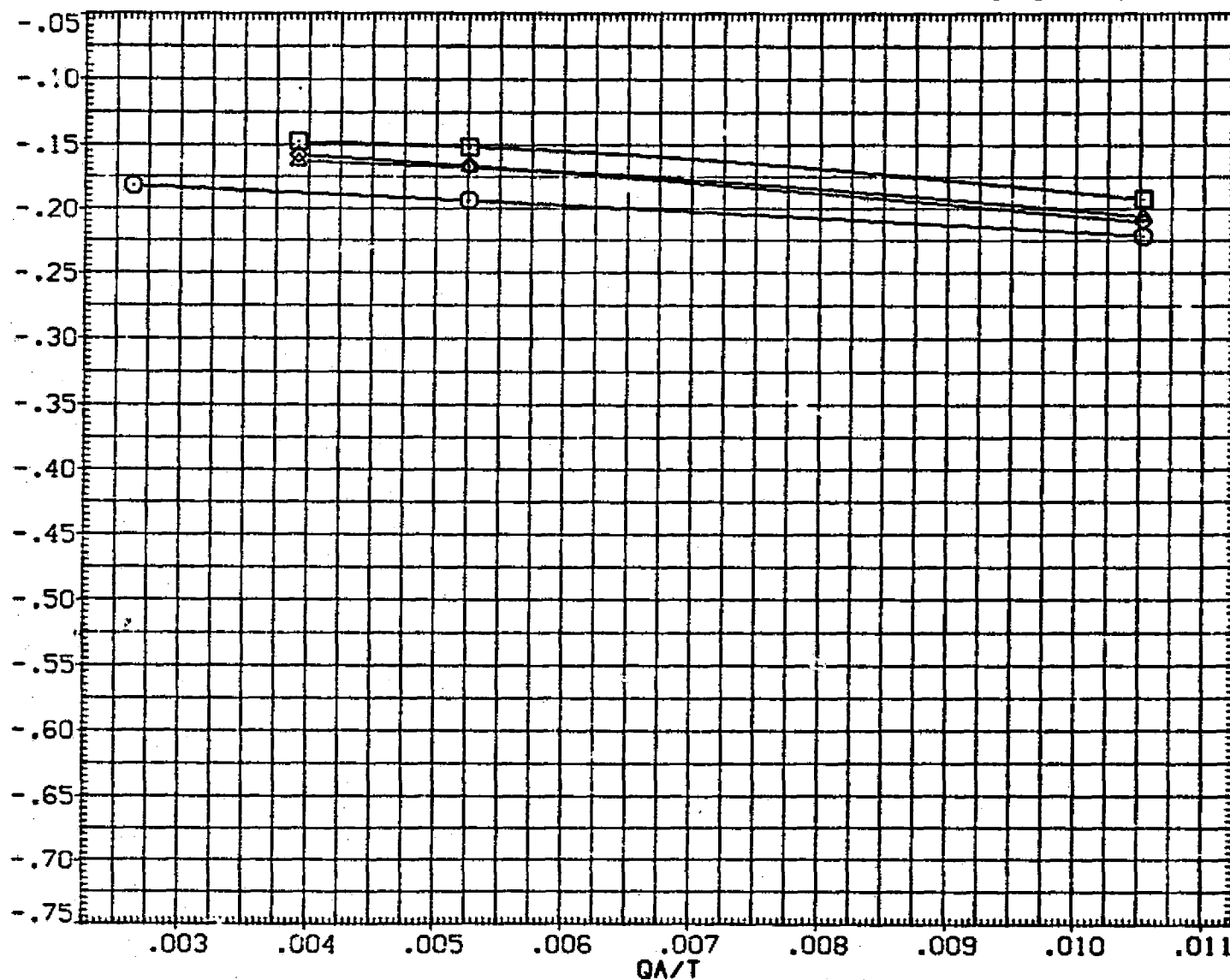


FIGURE 94. AREA RATIO EFFECTS, R/H UP FIRING JETS
(N)ALPHA = 30.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA075)	01N32 LARC CFHT 118 (MA-22)
(SJA076)	01N36 LARC CFHT 118 (MA-22)
(SJA077)	01N48 LARC CFHT 118 (MA-22)
(SJA078)	01N44 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BOFLAP	BETA	REFERENCE INFORMATION
.000	2.000	.000	.000	SREF 2690.0000 SQ. FT.
.000	2.000	.000	.000	LREF 474.8000 INCHES
.000	2.000	.000	.000	BREF 936.6800 INCHES
.000	2.000	.000	.000	AMRP 1076.7000 IN. X0
				YMRP .0000 IN. Y0
				ZMRP 375.0000 IN. Z0
				SCALE .0100

RCS JET AMPLIFICATION FACTOR - SIDE FORCE, N(SF)

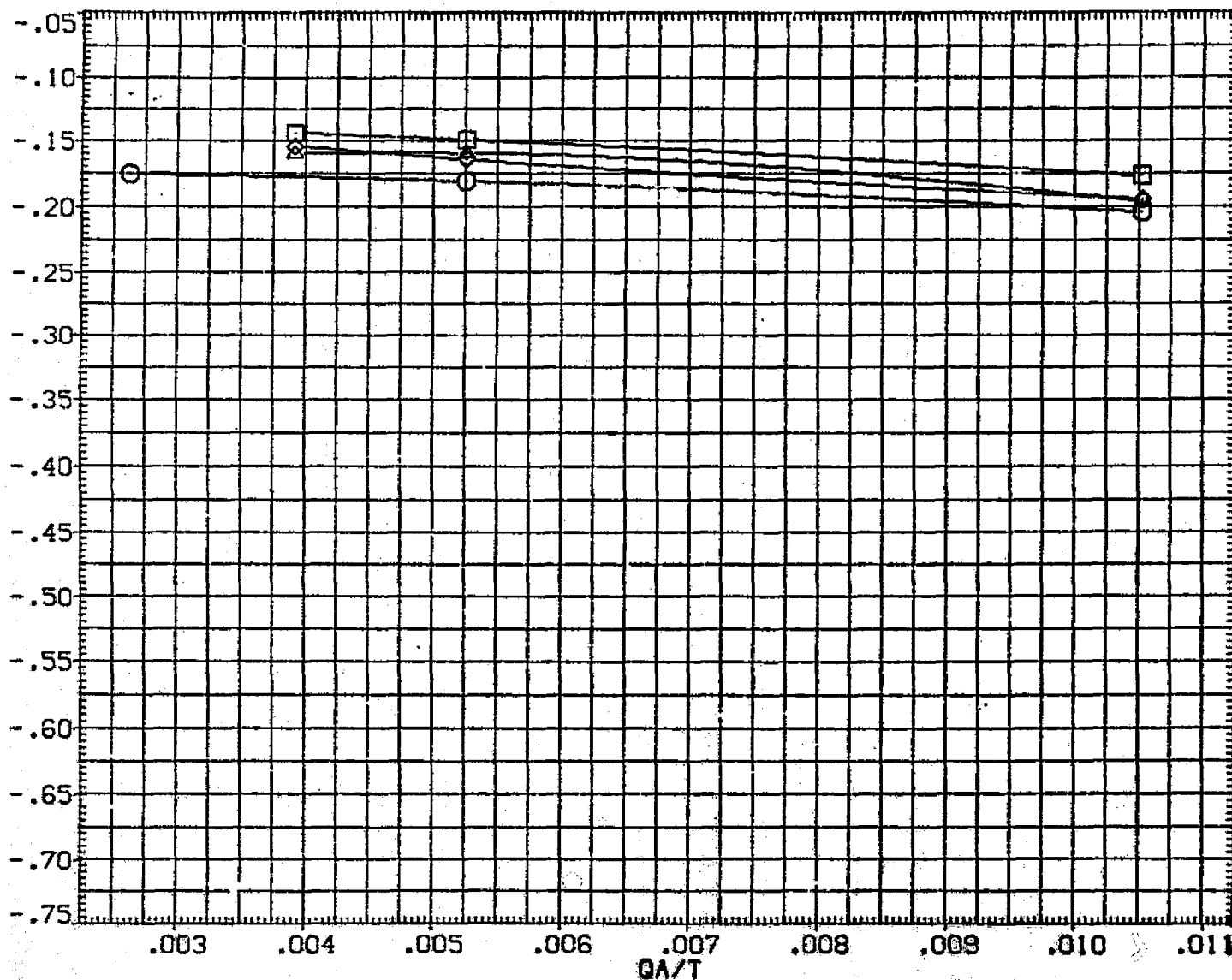


FIGURE 94. AREA RATIO EFFECTS, R/H UP, FIRING JETS
(C) ALPHA = 35.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA079)	01N33 LARC CFHT 118 (MA-22)
(SJA080)	01N37 LARC CFHT 118 (MA-22)
(SJA081)	01N61 LARC CFHT 118 (MA-22)
(SJA005)	01N85 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BD FLAP	BETA	REFERENCE INFORMATION
.000	2.000	.000	.000	SREF 2690.0000 SQ. FT.
.000	2.000	.000	.000	LREF 474.8000 INCHES
.000	2.000	.000	.000	BREF 936.6800 INCHES
.000	2.000	.000	.000	XMRP 1076.7000 IN. X0
				YMRP .0000 IN. Y0
				ZMRP 375.0000 IN. Z0
				SCALE .0100

RCS JET AMPLIFICATION FACTOR - NORMAL FORCE, N(NF)

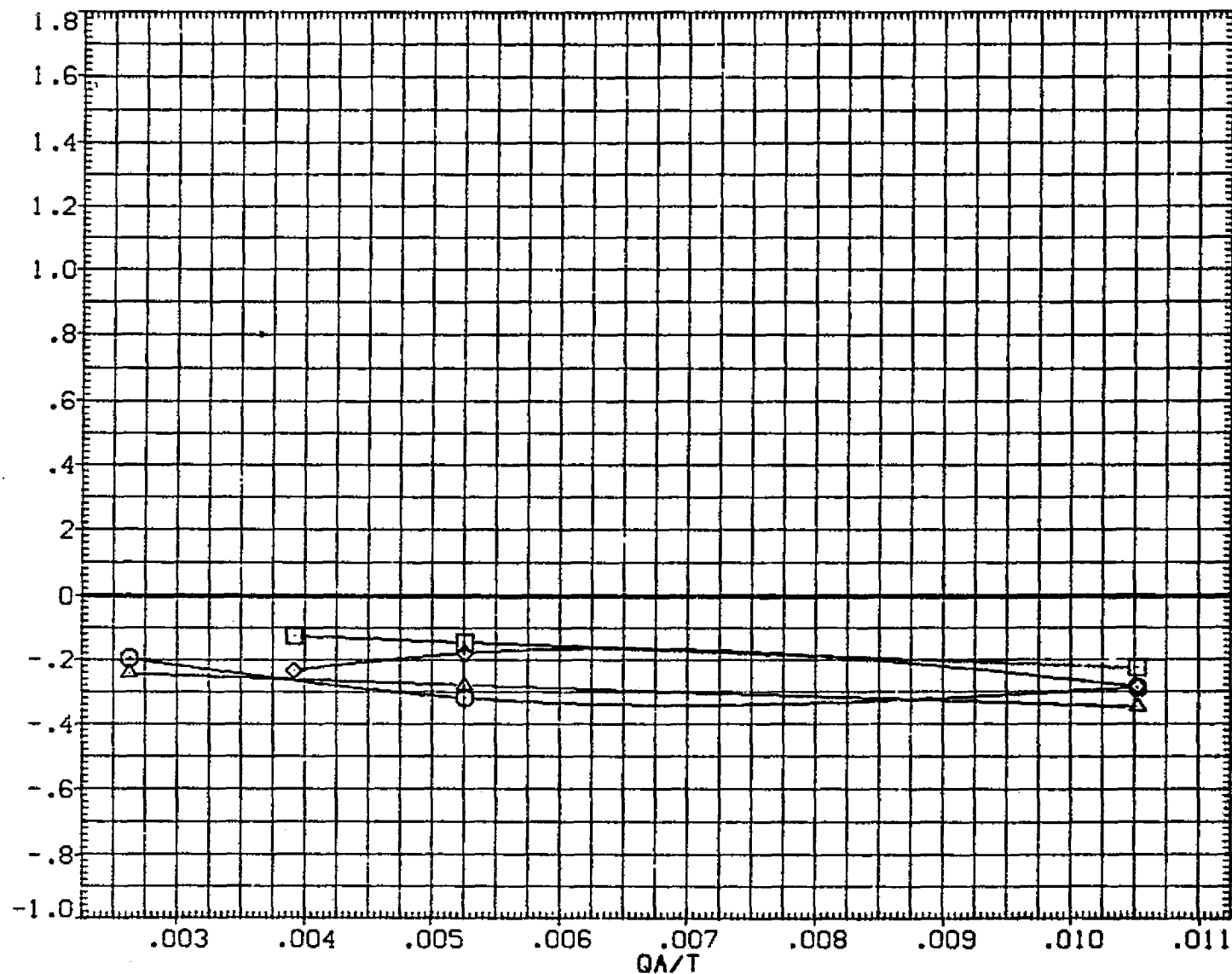


FIGURE 95. AREA RATIO EFFECTS, L/H SIDE FIRING JETS
(A) ALPHA = -8.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA079)	01N33 LARC CFHT 118 (MA-22)
(SJA080)	01N37 LARC CFHT 118 (MA-22)
(SJA081)	01N61 LARC CFHT 118 (MA-22)
(SJA005)	01N85 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BD FLAP	BETA	REFERENCE INFORMATION
.000	2.000	.000	.000	SREF 2690.0000 SQ. FT.
.000	2.000	.000	.000	LREF 474.8000 INCHES
.000	2.000	.000	.000	BREF 936.6800 INCHES
.000	2.000	.000	.000	XMRP 1076.7000 IN. X0
				YMRP .0000 IN. Y0
				ZMRP 375.0000 IN. Z0
				SCALE .0100

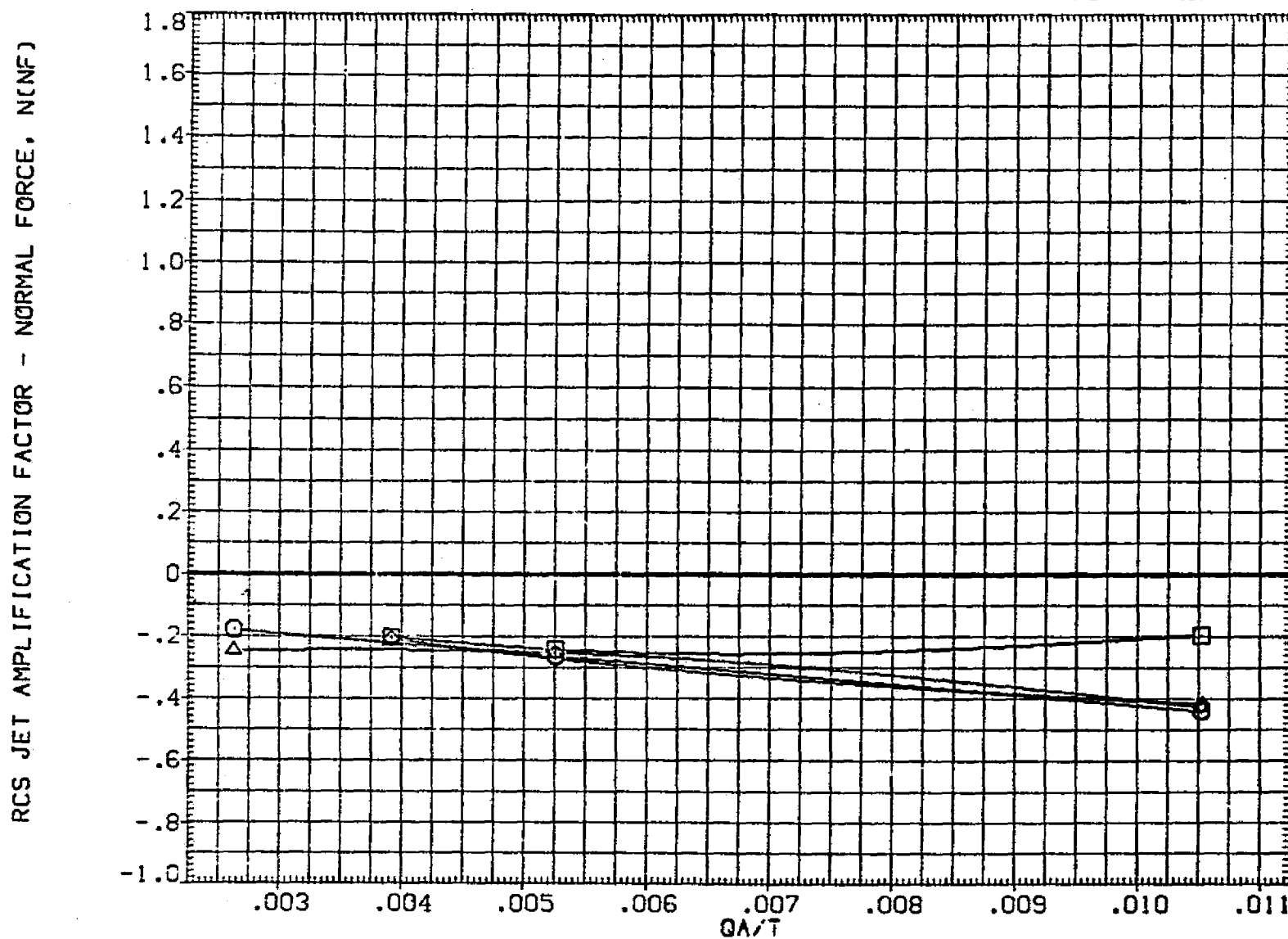


FIGURE 95. AREA RATIO EFFECTS, L/H SIDE FIRING JETS

(B) ALPHA = -6.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA079)	01N33 LARC CFHT 118 (MA-22)
(SJA080)	01N37 LARC CFHT 118 (MA-22)
(SJA081)	01N61 LARC CFHT 118 (MA-22)
(SJA005)	01N85 LARC CFHT 118 (MA-22)

ELEVON	NO. JE	BD FLAP	BETA	REFERENCE INFORMATION
.000	2.000	.000	.000	SREF 2690.0000 SQ. FT.
.000	2.000	.000	.000	LREF 474.8000 INCHES
.000	2.000	.000	.000	BREF 936.6800 INCHES
.000	2.000	.000	.000	XMRP 1076.7000 IN. X0
				YMRP .0000 IN. Y0
				ZMRP 375.0000 IN. Z0
				SCALE .0100

RCS JET AMPLIFICATION FACTOR - NORMAL FORCE, N(NF)

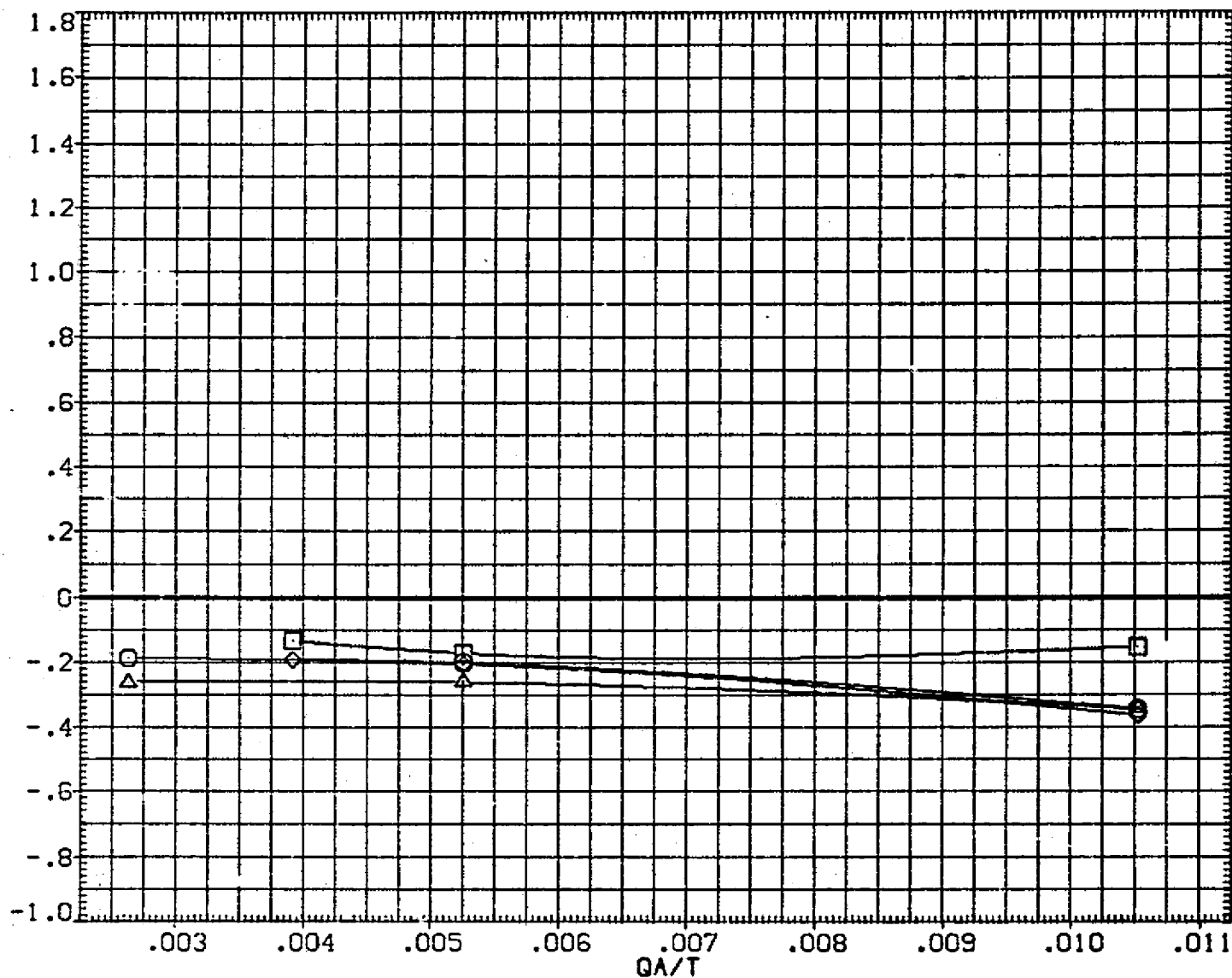


FIGURE 95. AREA RATIO EFFECTS, L/H SIDE FIRING JETS

(C) ALPHA = -4.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA079)	01N33 LARC CFHT 118 (MA-22)
(SJA080)	01N37 LARC CFHT 118 (MA-22)
(SJA081)	01N61 LARC CFHT 118 (MA-22)
(SJA005)	01N85 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BD FLAP	BETA	REFERENCE INFORMATION
.000	2.000	.000	.000	SREF 2690.0000 SQ. FT.
.000	2.000	.000	.000	LREF 474.8000 INCHES
.000	2.000	.000	.000	BREF 936.6800 INCHES
.000	2.000	.000	.000	XMRP 1076.7000 IN. X0
				YMRP .0000 IN. Y0
				ZMRP 375.0000 IN. Z0
				SCALE .0100

RCS JET AMPLIFICATION FACTOR - NORMAL FORCE, N(NF)

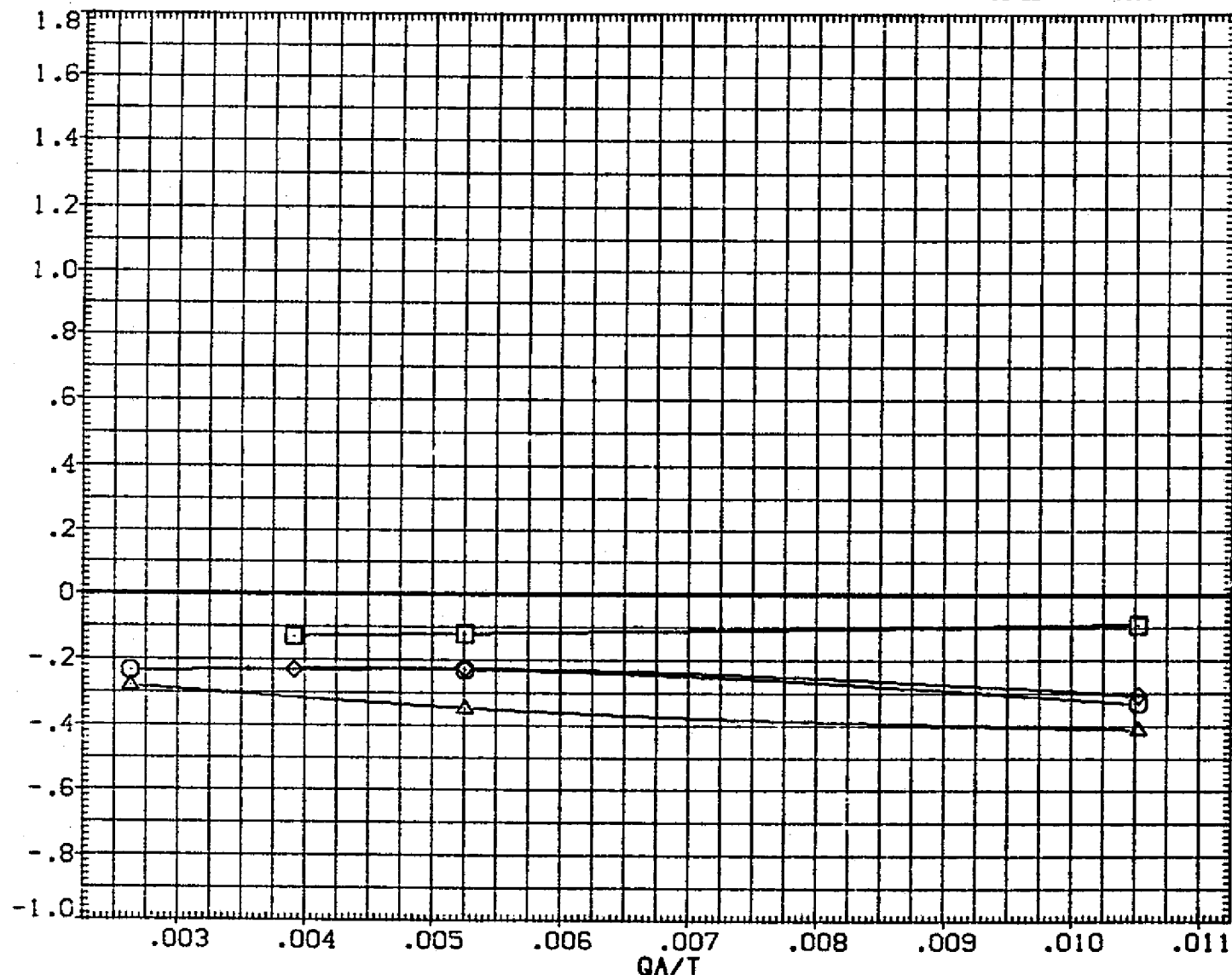


FIGURE 95. AREA RATIO EFFECTS, L/H SIDE FIRING JETS

(D) ALPHA = -2.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA079)	01N33 LARC CFHT 118 (MA-22)
(SJA080)	01N37 LARC CFHT 118 (MA-22)
(SJA081)	01N61 LARC CFHT 118 (MA-22)
(SJA005)	01N85 LARC CFHT 118 (MA-22)

ELEVON	NO.JET	BOFLAP	BETA	REFERENCE INFORMATION
.000	2.000	.000	.000	SREF 2690.0000 SQ.FT.
.000	2.000	.000	.000	LREF 474.8000 INCHES
.000	2.000	.000	.000	BREF 936.6800 INCHES
.000	2.000	.000	.000	XMHP 1076.7000 IN. X0
				YMHP .0000 IN. Y0
				ZMHP 375.0000 IN. Z0
				SCALE .0100

RCS JET AMPLIFICATION FACTOR - NORMAL FORCE, N(NF)

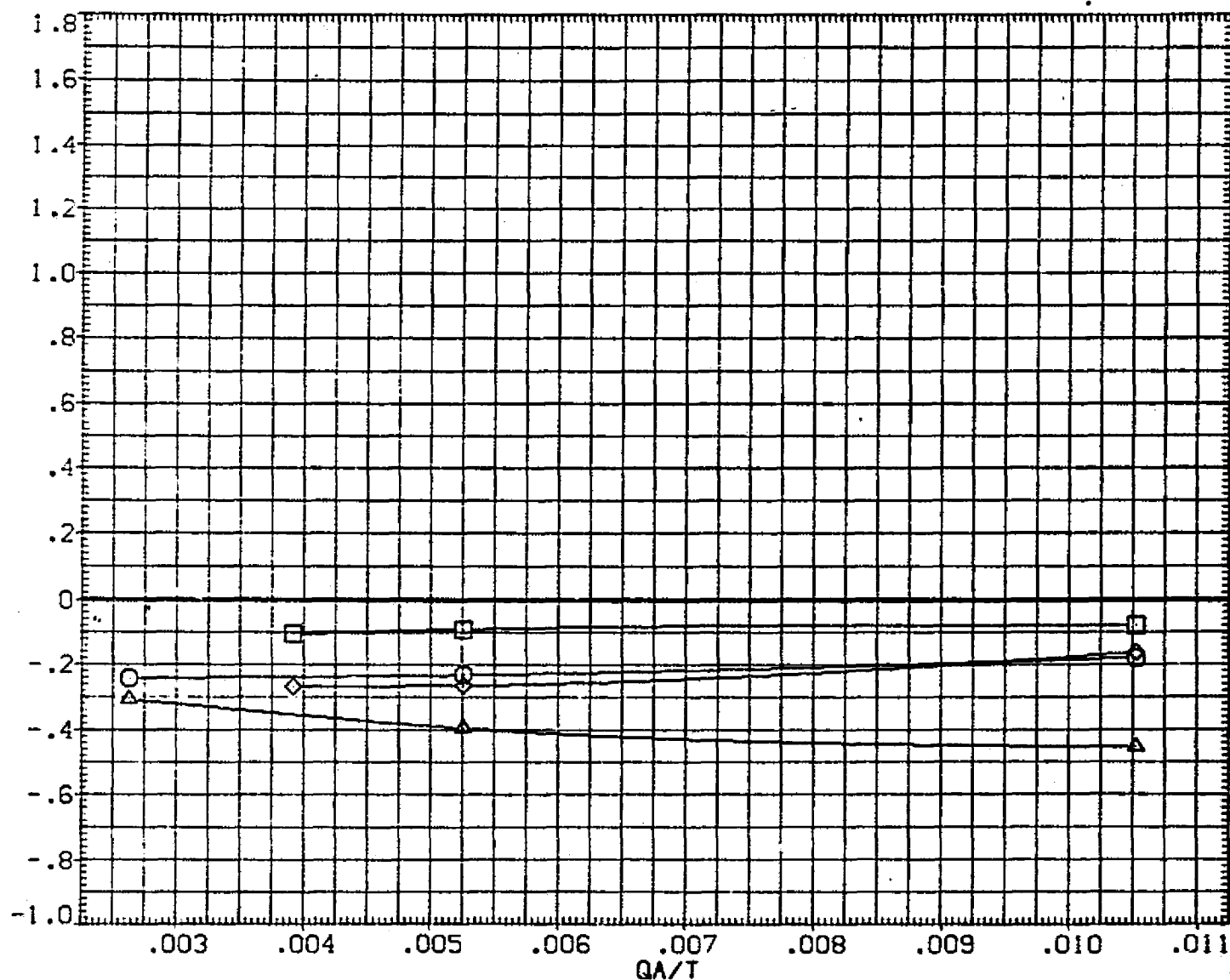


FIGURE 95. AREA RATIO EFFECTS, L/H SIDE FIRING JETS

(E) ALPHA = .00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA079)	01N33 LARC CFHT 118 (MA-22)
(SJA080)	01N37 LARC CFHT 118 (MA-22)
(SJA081)	01N61 LARC CFHT 118 (MA-22)
(SJA095)	01N85 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BD FLAP	BETA	REFERENCE INFORMATION
.000	2.000	.000	.000	SREF 2690.0000 SQ. FT.
.000	2.000	.000	.000	LREF 474.8000 INCHES
.000	2.000	.000	.000	BREF 936.6800 INCHES
.000	2.000	.000	.000	XMRP 1076.7000 IN. X0
				YMRP .0000 IN. Y0
				ZMRP 375.0000 IN. Z0
				SCALE .0100

RCS JET AMPLIFICATION FACTOR - NORMAL FORCE, N(NF)

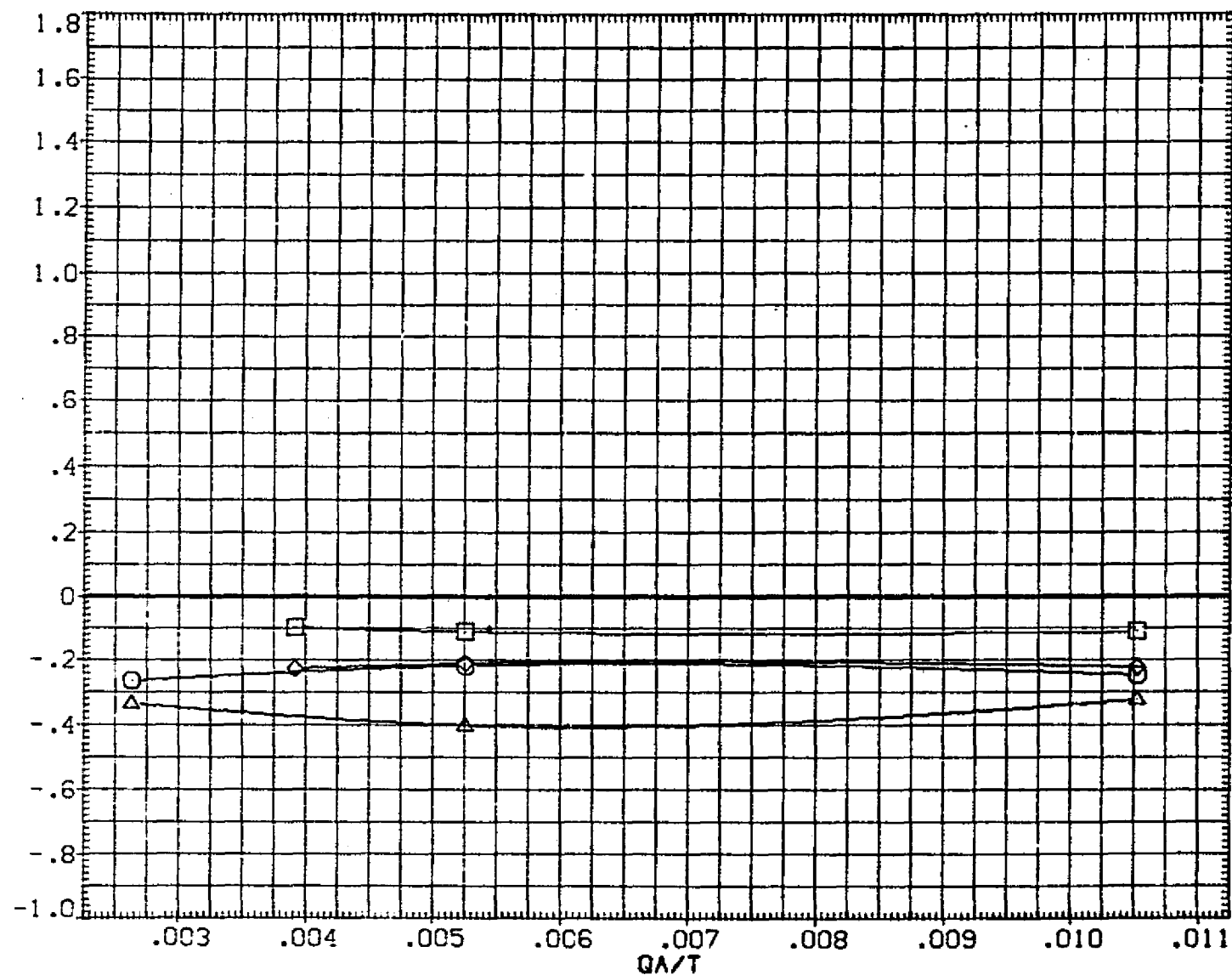


FIGURE 95. AREA RATIO EFFECTS, L/H SIDE FIRING JETS

(F) ALPHA = 2.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA079)	01N33 LARC CFHT 118 (MA-22)
(SJA080)	01N37 LARC CFHT 118 (MA-22)
(SJA081)	01N61 LARC CFHT 118 (MA-22)
(SJA005)	01N85 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	GD FLAP	BETA	REFERENCE INFORMATION		
.000	2.000	.000	.000	SREF	2690.0000	SQ. FT.
.000	2.000	.000	.000	LREF	474.8000	INCHES
.000	2.000	.000	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.0100	

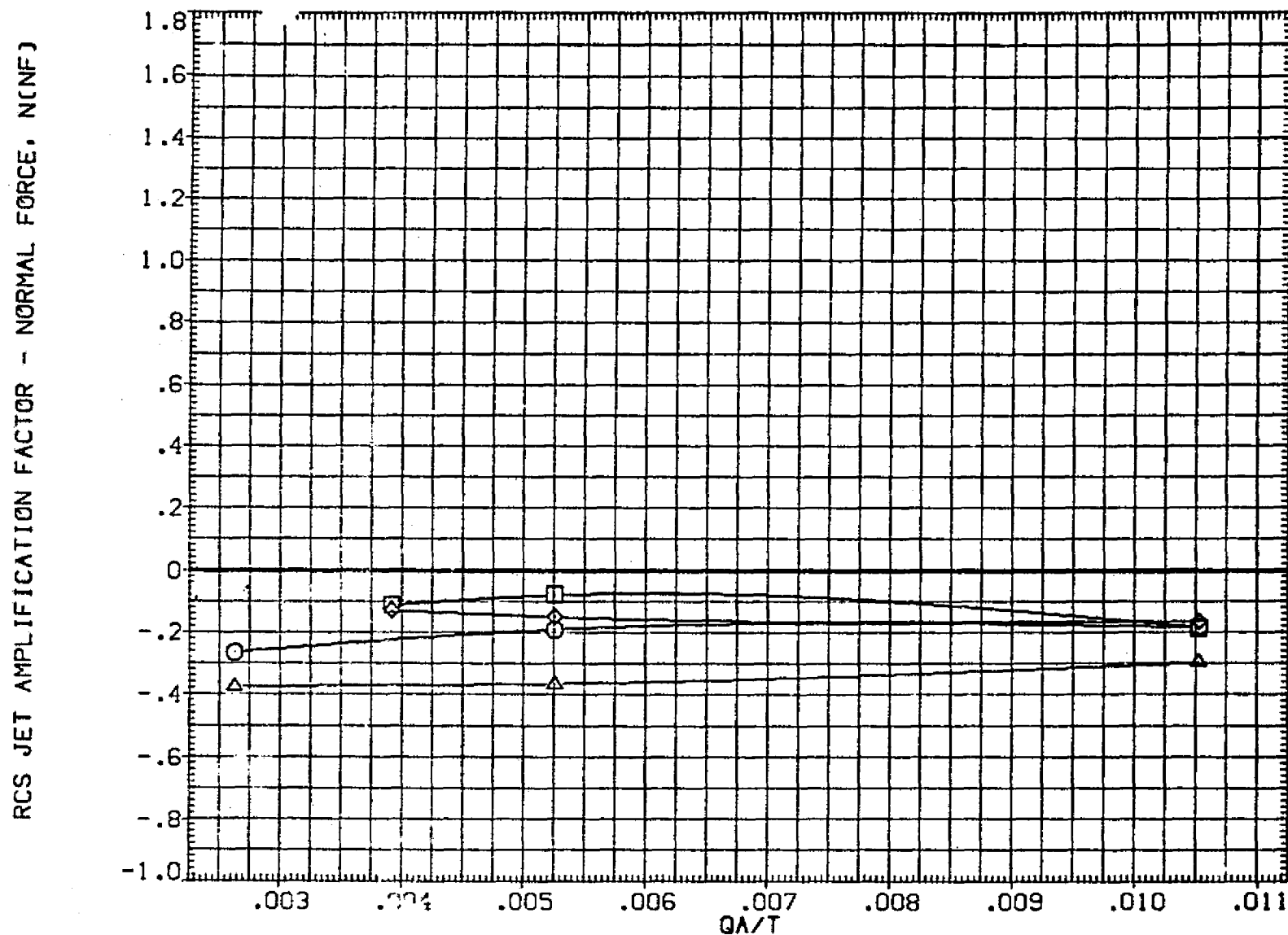


FIGURE 95. AREA RATIO EFFECTS, L/H SIDE FIRING JETS

(G) ALPHA = 4.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA079)	GIN33 LARC CFHT 118 (MA-22)
(SJA080)	GIN37 LARC CFHT 118 (MA-22)
(SJA081)	GIN61 LARC CFHT 118 (MA-22)
(SJA005)	GIN85 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BOFLAP	BETA	REFERENCE INFORMATION
.000	2.000	.000	.000	SREF 2690.0000 SQ. FT.
.000	2.000	.000	.000	LREF 474.8000 INCHES
.000	2.000	.000	.000	BREF 936.6800 INCHES
.000	2.000	.000	.000	XMRP 1076.7000 IN. X0
				YMRP .0000 IN. Y0
				ZMRP 375.0000 IN. Z0
				SCALE .0100

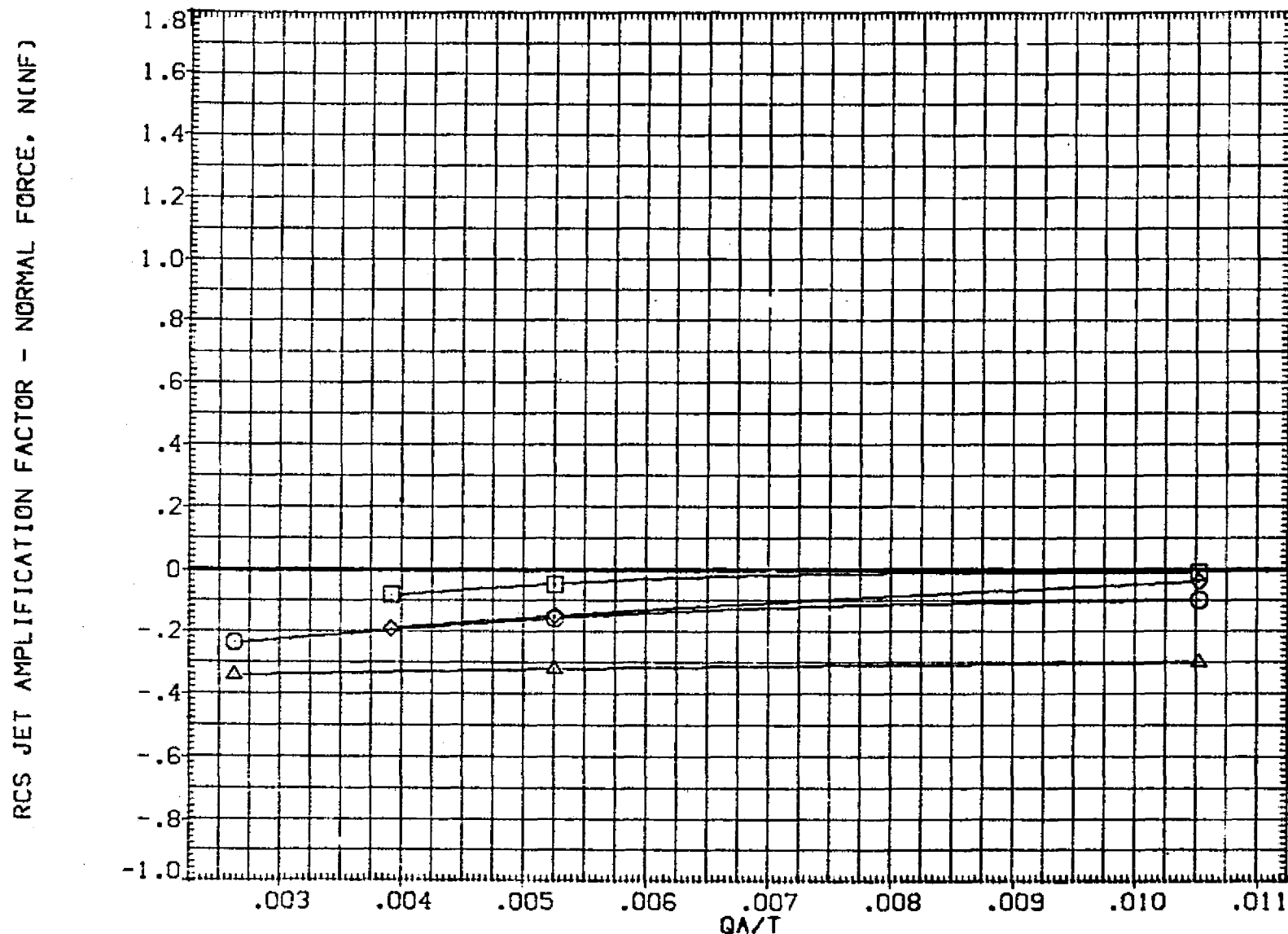


FIGURE 95. AREA RATIO EFFECTS, L/H SIDE FIRING JETS

(H) ALPHA = 6.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA079)	01N33 LARC CFHT 118 (MA-22)
(SJA080)	01N37 LARC CFHT 118 (MA-22)
(SJA081)	01N61 LARC CFHT 118 (MA-22)
(SJA005)	01N85 LARC CFHT 118 (MA-22)

ELEVON	NO.JET	BDFLAP	BETA	REFERENCE INFORMATION
.000	2.000	.000	.000	SREF 2690.0000 SQ.FT.
.000	2.000	.000	.000	LREF 474.8000 INCHES
.000	2.000	.000	.000	BREF 936.6800 INCHES
.000	2.000	.000	.000	XMRP 1076.7000 IN. X3
				YMRP .0000 IN. Y0
				ZMRP 375.0000 IN. Y0
				SCALE .0100

RCS JET AMPLIFICATION FACTOR - NORMAL FORCE, N(NF)

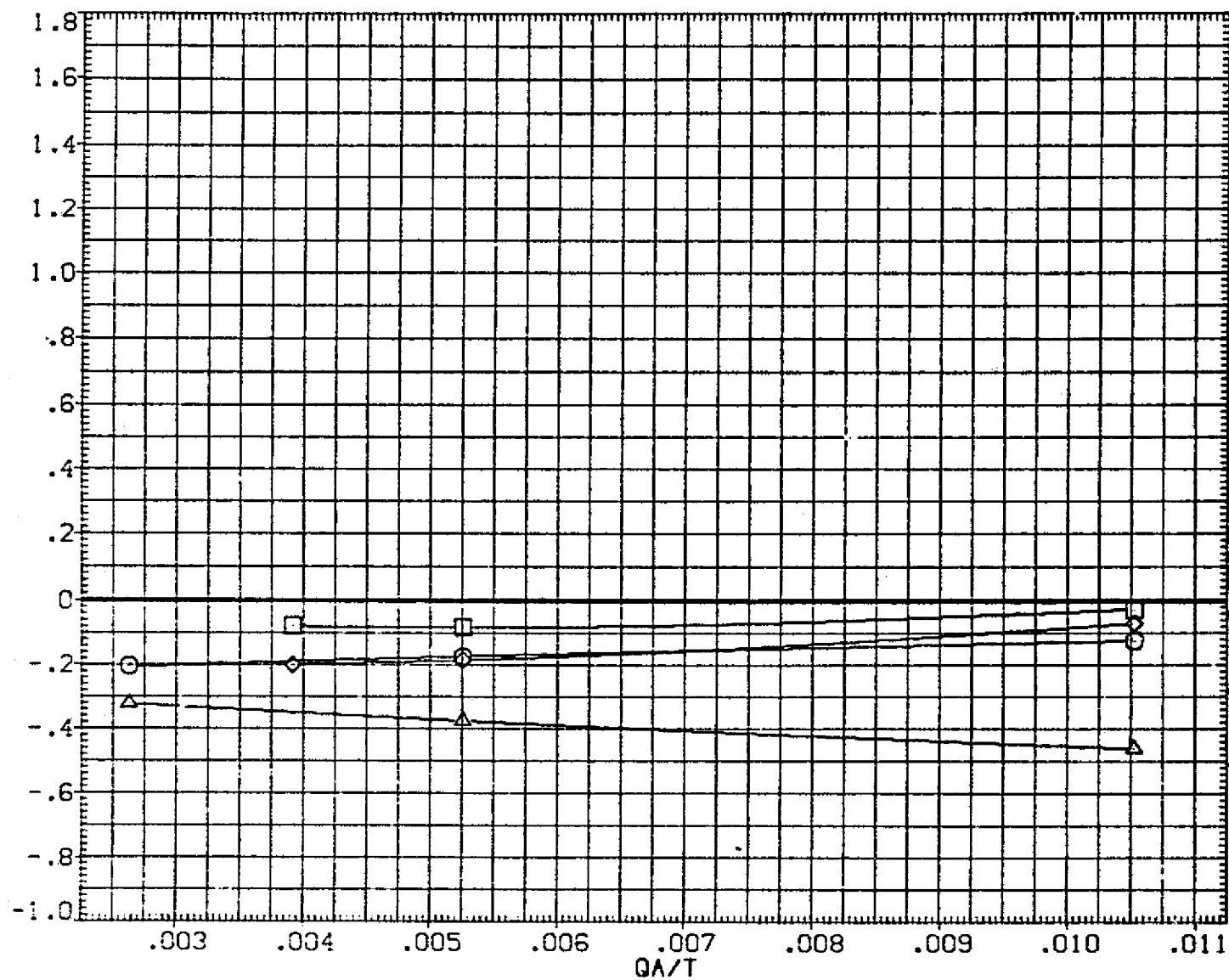


FIGURE 95. AREA RATIO EFFECTS, L/H SIDE FIRING JETS

CALPHA = 8.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA079)	01N33 LARC CFHT 118 (MA-22)
(SJA080)	01N37 LARC CFHT 118 (MA-22)
(SJA081)	01N61 LARC CFHT 118 (MA-22)
(SJA005)	01N85 LARC CFHT 118 (MA-22)

ELEVON	NO.JET	BDFLAP	BETA	REFERENCE INFORMATION		
.000	2.000	.000	.000	SREF	2690.0000	50.FT.
.000	2.000	.000	.000	LREF	474.8000	INCHES
.000	2.000	.000	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - NORMAL FORCE, N(NF)

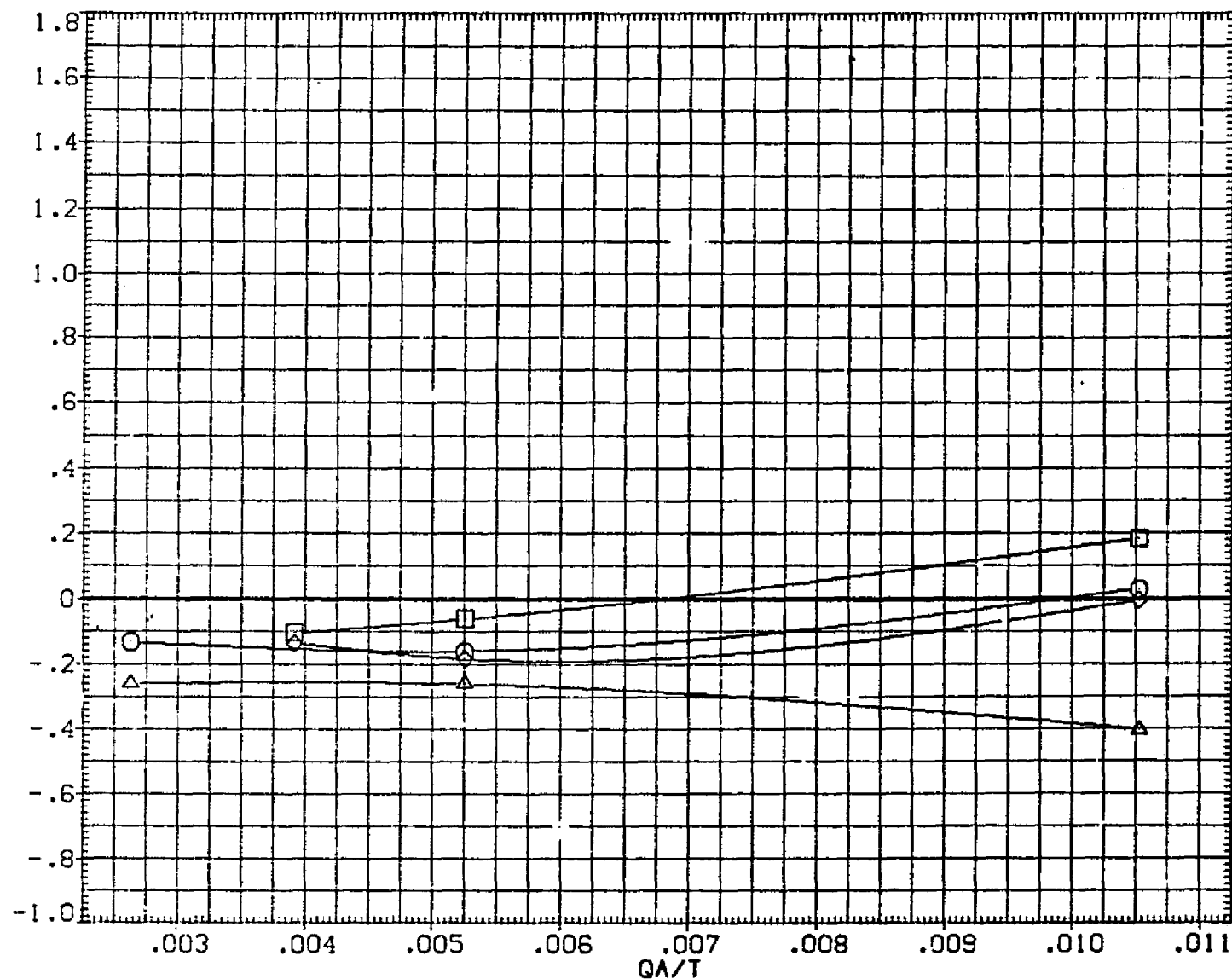


FIGURE 95. AREA RATIO EFFECTS, L/H SIDE FIRING JETS

(J) ALPHA = 10.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA079)	01N33 LARC CFHT 118 (MA-22)
(SJA080)	01N37 LARC CFHT 118 (MA-22)
(SJA081)	01N61 LARC CFHT 118 (MA-22)
(SJA005)	01N85 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BD FLAP	BETA	REFERENCE INFORMATION		
.000	2.000	.000	.000	SREF	2690.0000	SQ. FT.
.000	2.000	.000	.000	LREF	474.8000	INCHES
.000	2.000	.000	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.0100	

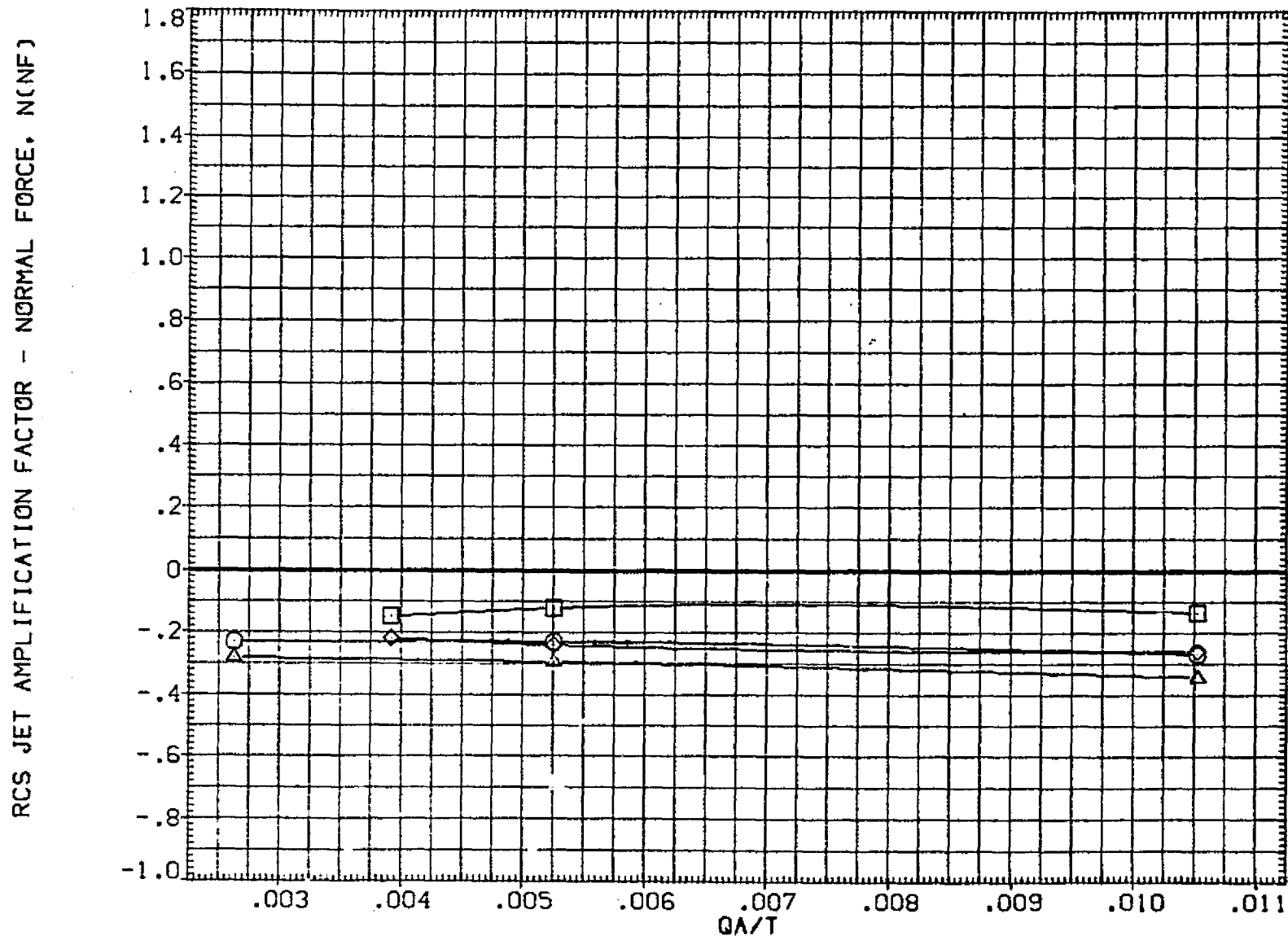


FIGURE 95. AREA RATIO EFFECTS, L/H SIDE FIRING JETS

(K) ALPHA = 15.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA079)	01N33 LARC CFHT 118 (MA-22)
(SJA080)	01N37 LARC CFHT 118 (MA-22)
(SJA081)	01N61 LARC CFHT 118 (MA-22)
(SJA005)	01N85 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BOFLAP	BETA	REFERENCE INFORMATION		
.000	2.000	.000	.000	SREF	2690.0000	SQ. FT.
.000	2.000	.000	.000	LREF	474.8000	INCHES
.000	2.000	.000	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - NORMAL FORCE, N(NF)

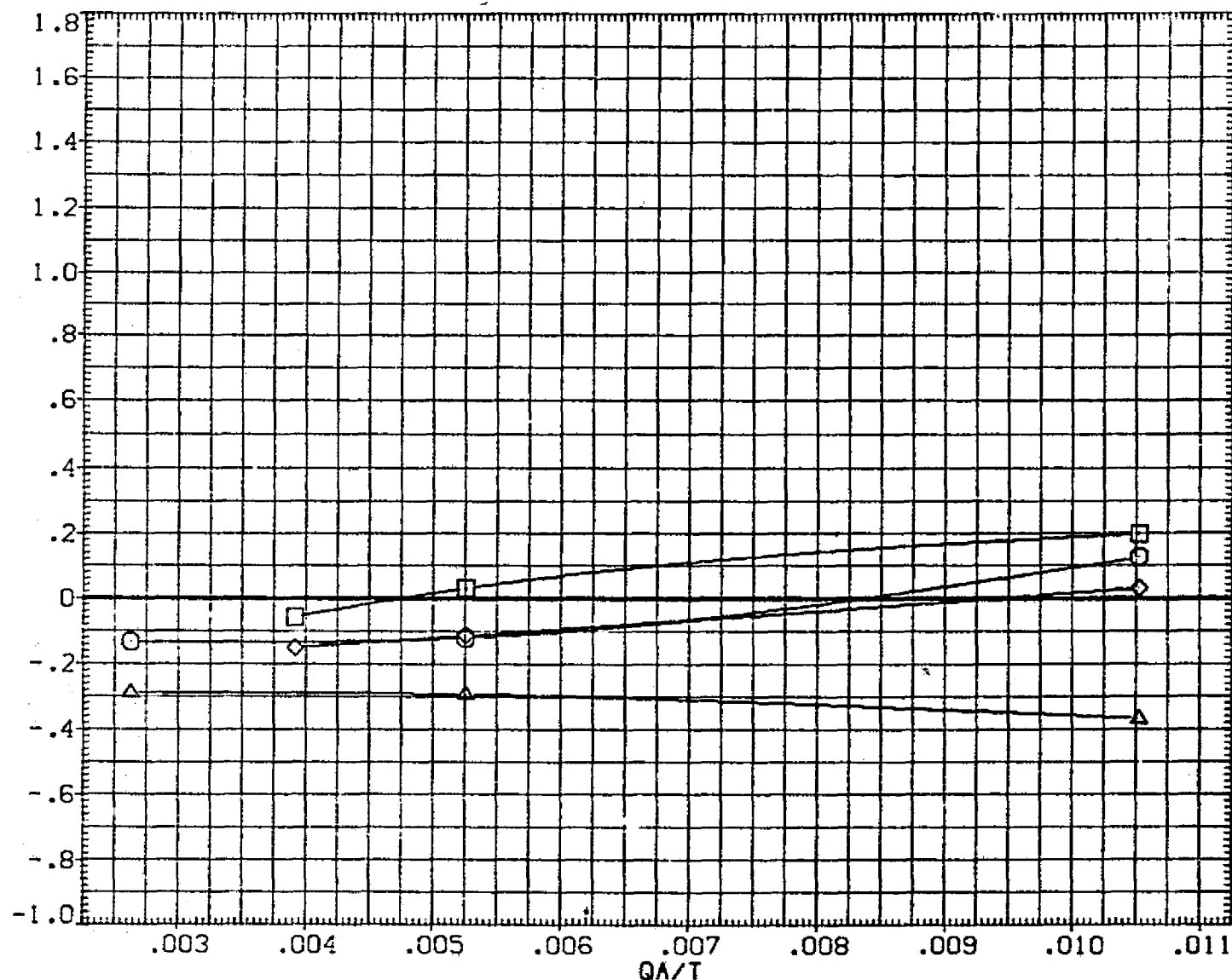


FIGURE 95. AREA RATIO EFFECTS, L/H SIDE FIRING JETS

(L) ALPHA = 20.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA079)	QIN33 LARC CFHT 118 (MA-22)
(SJA080)	QIN37 LARC CFHT 118 (MA-22)
(SJA081)	QIN61 LARC CFHT 118 (MA-22)
(SJA005)	QIN85 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BOFLAP	BETA	REFERENCE INFORMATION
.000	2.000	.000	.000	SREF 2690.0000 SQ. FT.
.000	2.000	.000	.000	LREF 474.8000 INCHES
.000	2.000	.000	.000	BREF 936.6800 INCHES
.000	2.000	.000	.000	XMRP 1076.7000 IN. X0
				YMRP .0000 IN. Y0
				ZMRP 375.0000 IN. Z0
				SCALE .0100

RCS JET AMPLIFICATION FACTOR - NORMAL FORCE, N(NF)

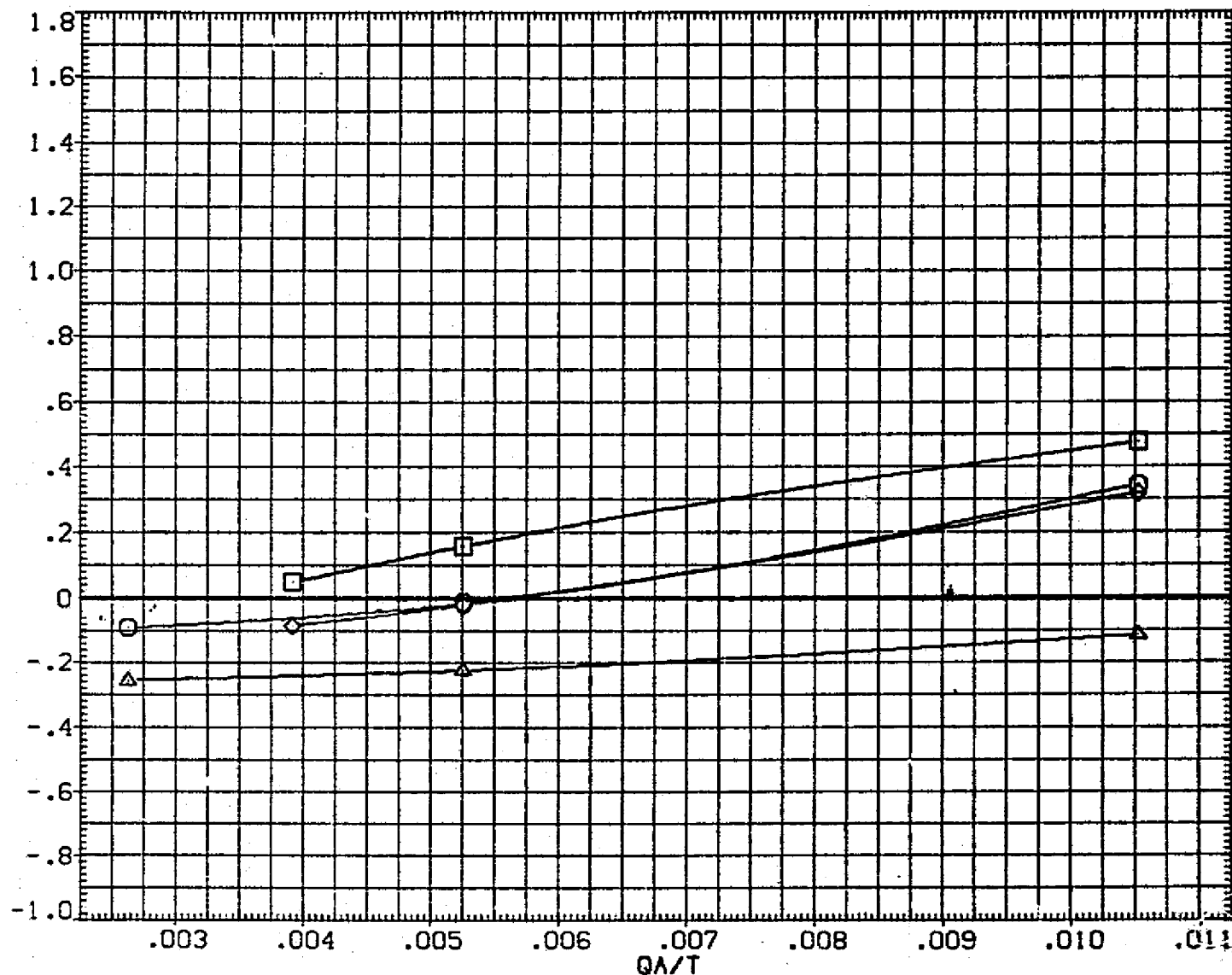


FIGURE 95. AREA RATIO EFFECTS, L/H SIDE FIRING JETS

(M)ALPHA = 25.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA079)	01N33 LARC CFHT 118 (MA-22)
(SJA080)	01N37 LARC CFHT 118 (MA-22)
(SJA081)	01N61 LARC CFHT 118 (MA-22)
(SJA005)	01N85 LARC CFHT 118 (MA-22)

ELEVON	NO.JET	BOFLAP	BETA	REFERENCE INFORMATION		
.000	2.000	.000	.000	SREF	2590.0000	50.FT.
.000	2.000	.000	.000	LREF	474.8000	INCHES
.000	2.000	.000	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.010	

RCS JET AMPLIFICATION FACTOR - NORMAL FORCE, N(NF)

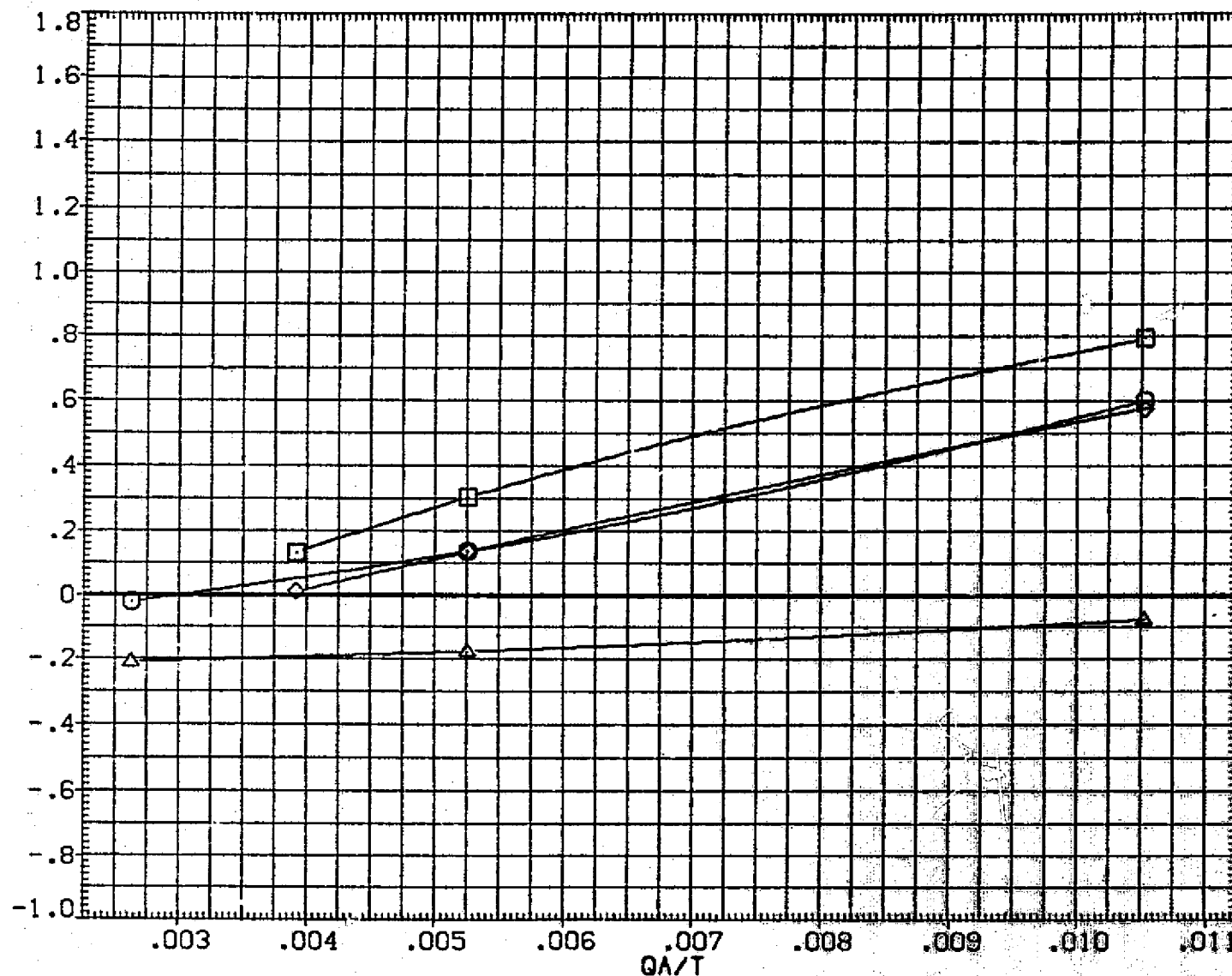


FIGURE 95. AREA RATIO EFFECTS, L/H SIDE FIRING JETS
(N)ALPHA = 30.00

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION
(SJA079)	○	01N33 LARC CFHT 118 (MA-22)
(SJA080)	□	01N37 LARC CFHT 118 (MA-22)
(SJA081)	◇	01N61 LARC CFHT 118 (MA-22)
(SJA005)	△	01N85 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BD FLAP	BETA	REFERENCE INFORMATION		
.000	2.000	.000	.000	SREF	2690.0000	50. FT.
.000	2.000	.000	.000	LREF	474.8000	INCHES
.000	2.000	.000	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - NORMAL FORCE, N(NF)

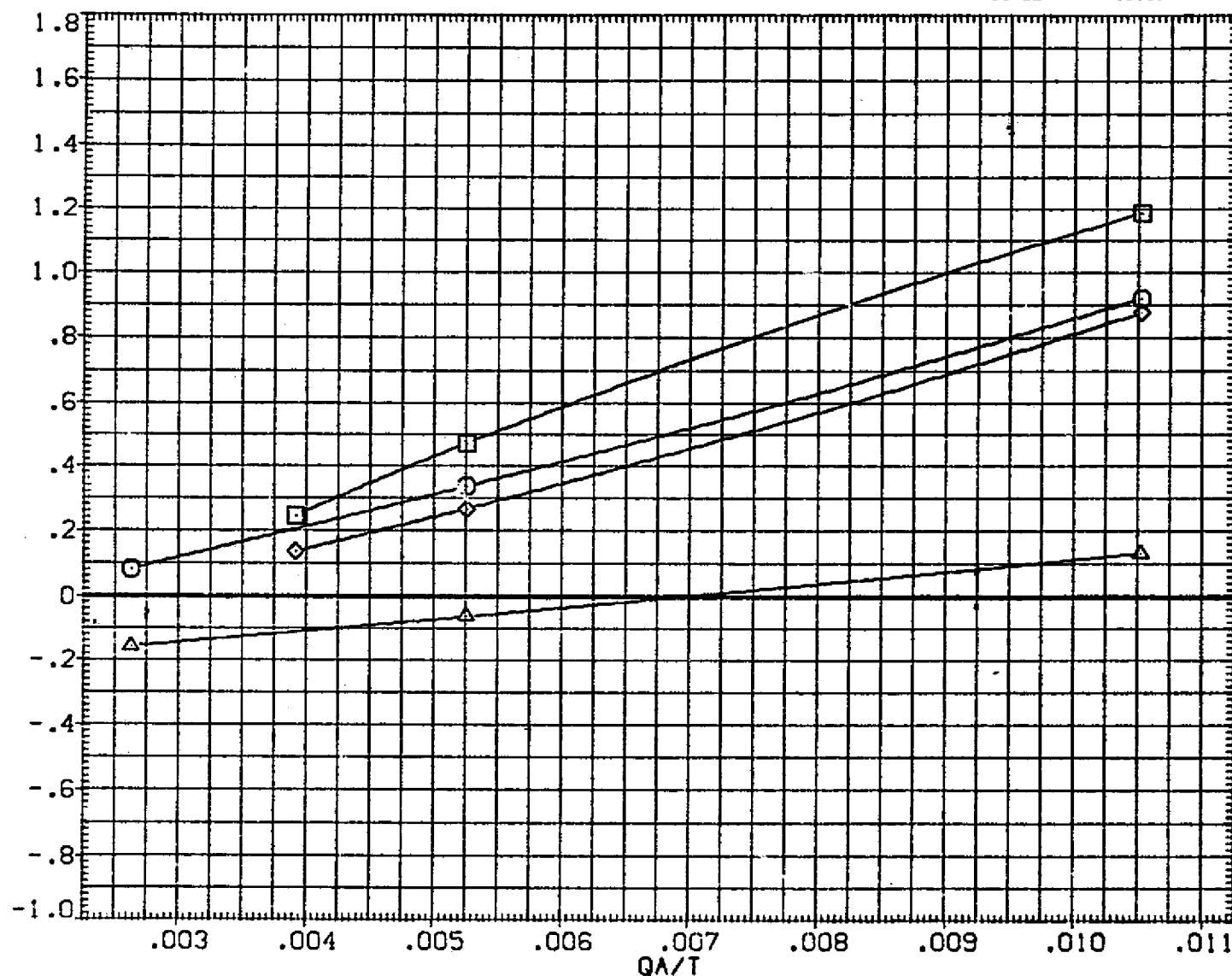


FIGURE 95. AREA RATIO EFFECTS, L/H SIDE FIRING JETS

(C) ALPHA = 35.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA079)	01N33 LARC CFHT 118 (MA-22)
(SJA080)	01N37 LARC CFHT 118 (MA-22)
(SJA081)	01N61 LARC CFHT 118 (MA-22)
(SJA005)	01N85 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BOFLAP	BETA	REFERENCE INFORMATION
.000	2.000	.000	.000	SREF 2690.0000 SQ. FT.
.000	2.000	.000	.000	LREF 474.8000 INCHES
.000	2.000	.000	.000	BREF 936.6800 INCHES
.000	2.000	.000	.000	XMRP 1076.7000 IN. X0
				YMRP .0000 IN. Y0
				ZMRP 375.0000 IN. Z0
				SCALE .0100

RCS JET AMPLIFICATION FACTOR - PITCH, N(PM)

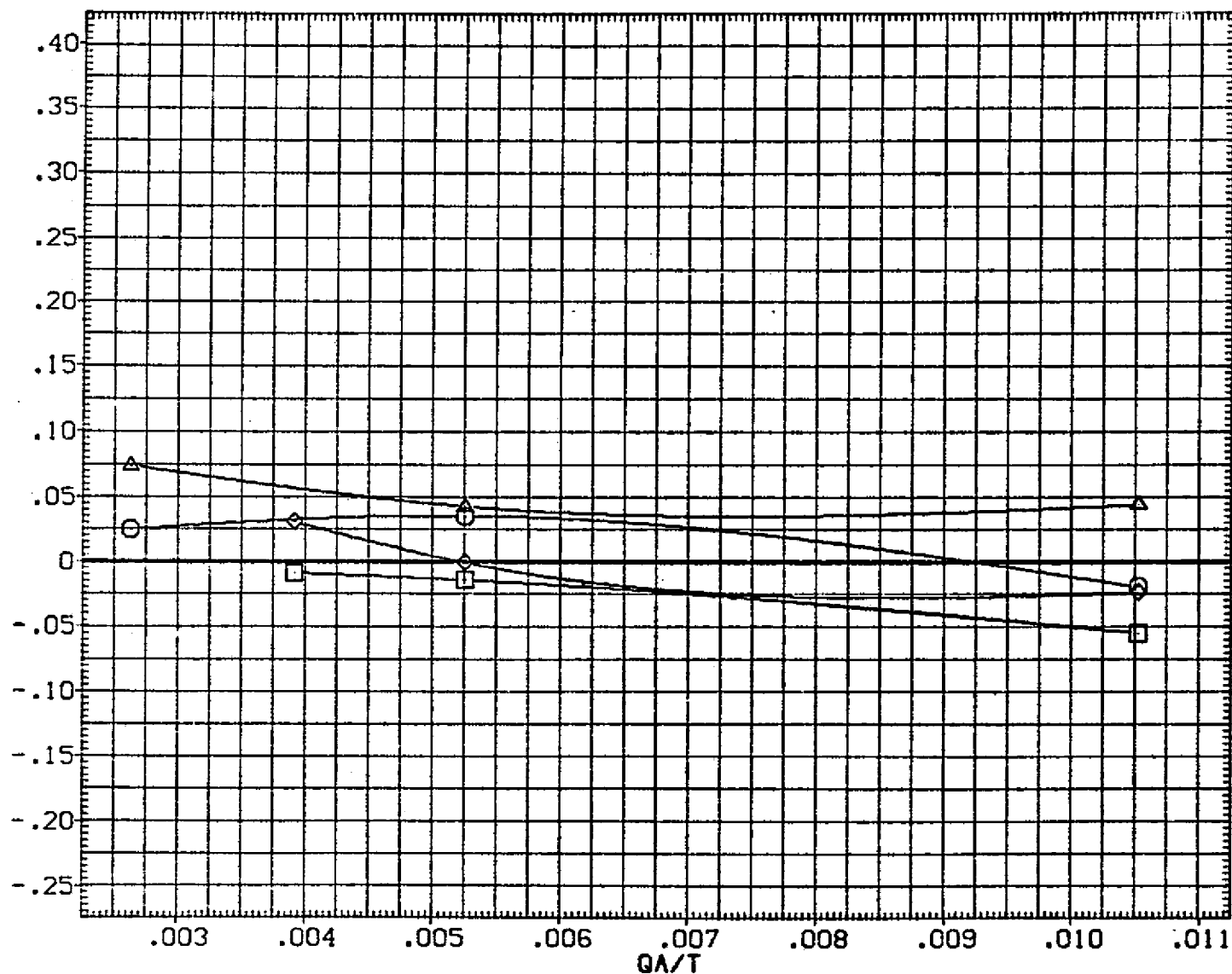


FIGURE 95. AREA RATIO EFFECTS, L/H SIDE FIRING JETS

(A) ALPHA = -8.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA079)	01N33 LARC CFHT 118 (MA-22)
(SJA080)	01N37 LARC CFHT 118 (MA-22)
(SJA081)	01N61 LARC CFHT 118 (MA-22)
(SJA005)	01N85 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BO FLAP	BETA	REFERENCE INFORMATION
.000	2.000	.000	.000	SREF 2690.0000 SQ. FT.
.000	2.000	.000	.000	LREF 474.8000 INCHES
.000	2.000	.000	.000	BREF 936.6800 INCHES
.000	2.000	.000	.000	XMRP 1076.7000 IN. X0
				YMRP .0000 IN. Y0
				ZMRP 375.0000 IN. Z0
				SCALE .0100

RCS JET AMPLIFICATION FACTOR - PITCH, N(PM)

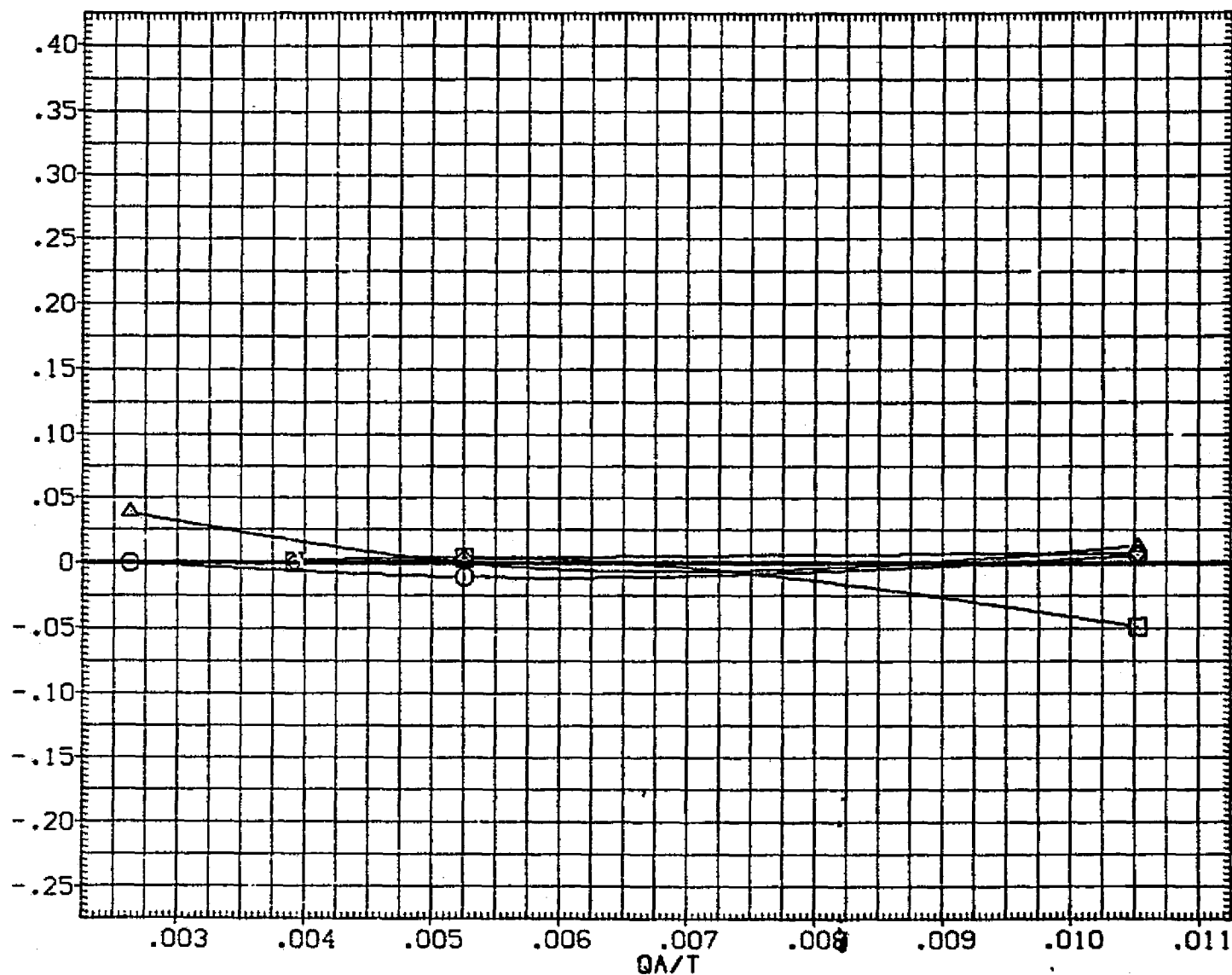


FIGURE 95. AREA RATIO EFFECTS, L/H SIDE FIRING JETS

(B) ALPHA = -6.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA079)	01N33 LARC CFHT 118 (MA-22)
(SJA080)	01N37 LARC CFHT 118 (MA-22)
(SJA081)	01N61 LARC CFHT 118 (MA-22)
(SJA005)	01N85 LARC CFHT 118 (MA-22)

ELEVON	NO.JET	BDFLAP	BETA	REFERENCE INFORMATION
.000	2.000	.000	.000	SREF 2690.0000 SQ.FT.
.000	2.000	.000	.000	LREF 474.8000 INCHES
.000	2.000	.000	.000	BREF 936.6800 INCHES
.000	2.000	.000	.000	XMRP 1076.7000 IN. XO
				YMRP .0000 IN. YO
				ZMRP 375.0000 IN. ZO
				SCALE .0100

RCS JET AMPLIFICATION FACTOR - PITCH, N(PM)

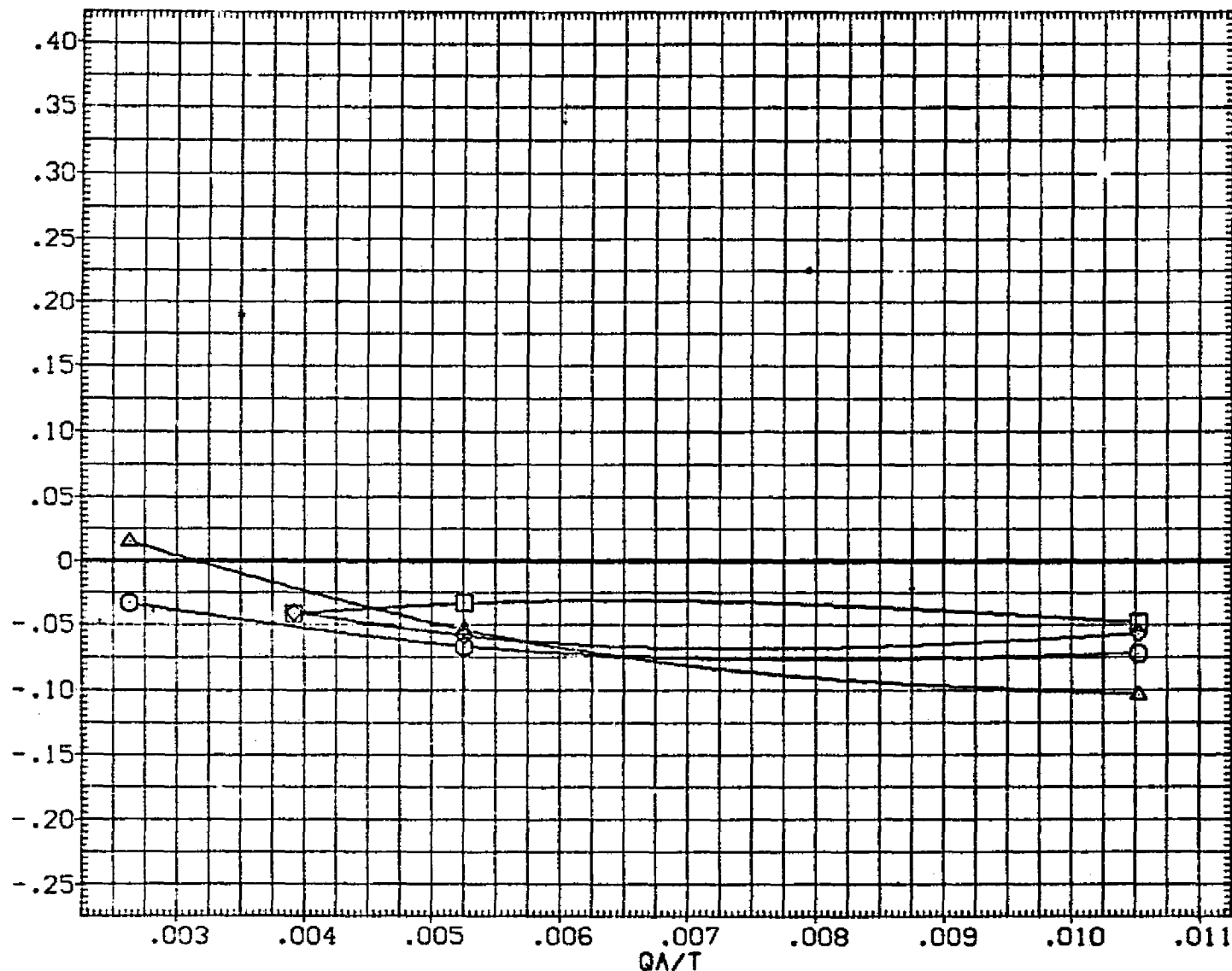


FIGURE 95. AREA RATIO EFFECTS, L/H SIDE FIRING JETS
(C) ALPHA = -4.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA079)	QIN33 LARC CFHT 118 (MA-22)
(SJA080)	QIN37 LARC CFHT 118 (MA-22)
(SJA081)	QIN61 LARC CFHT 118 (MA-22)
(SJA005)	QIN85 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BOFLAP	BETA	REFERENCE INFORMATION		
.000	2.000	.000	.000	SREF	2690.0000	50. FT.
.000	2.000	.000	.000	LREF	474.8000	INCHES
.000	2.000	.000	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XMHP	1076.7000	IN. X0
				YMHP	.0000	IN. Y0
				ZMHP	375.0000	IN. Z0
				SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - PITCH, NCPM)

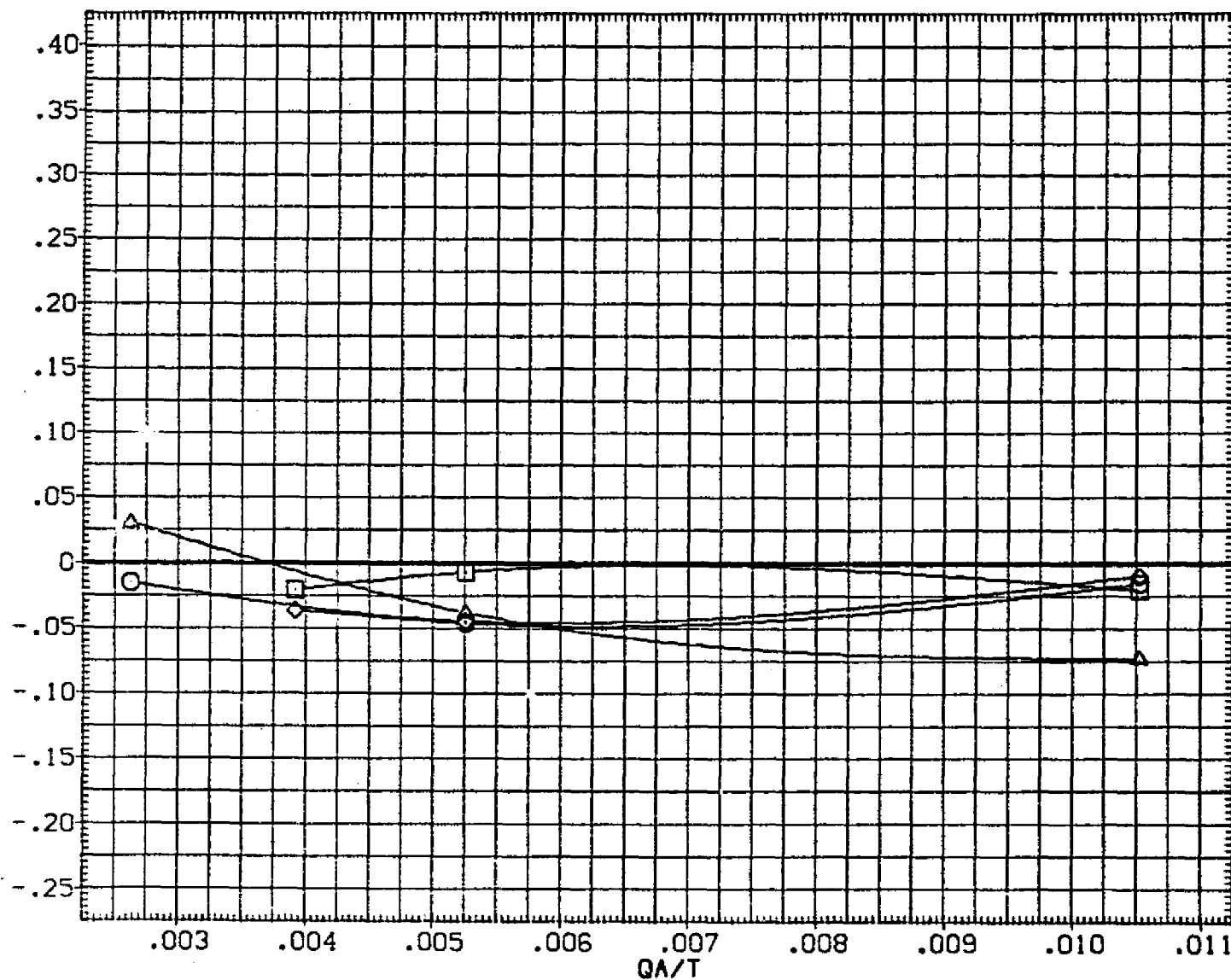


FIGURE 95. AREA RATIO EFFECTS, L/H SIDE FIRING JETS

(C) ALPHA = -2.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA079)	QIN33 LARC CFHT 118 (MA-22)
(SJA080)	QIN37 LARC CFHT 118 (MA-22)
(SJA081)	QIN61 LARC CFHT 118 (MA-22)
(SJA085)	QIN85 LARC CFHT 118 (MA-22)

ELEVON	NS.JET	BDFLAP	BETA	REFERENCE INFORMATION	
.000	2.000	.000	.000	SREF	2690.0000 SQ.FT.
.000	2.000	.000	.000	LREF	474.8000 INCHES
.000	2.000	.000	.000	BREF	936.6800 INCHES
.000	2.000	.000	.000	XMRP	1076.7000 IN. X0
				YMRP	.0000 IN. Y0
				ZMRP	375.0000 IN. Z0
				SCALE	.0100

RCS JET AMPLIFICATION FACTOR - PITCH, NCPM)

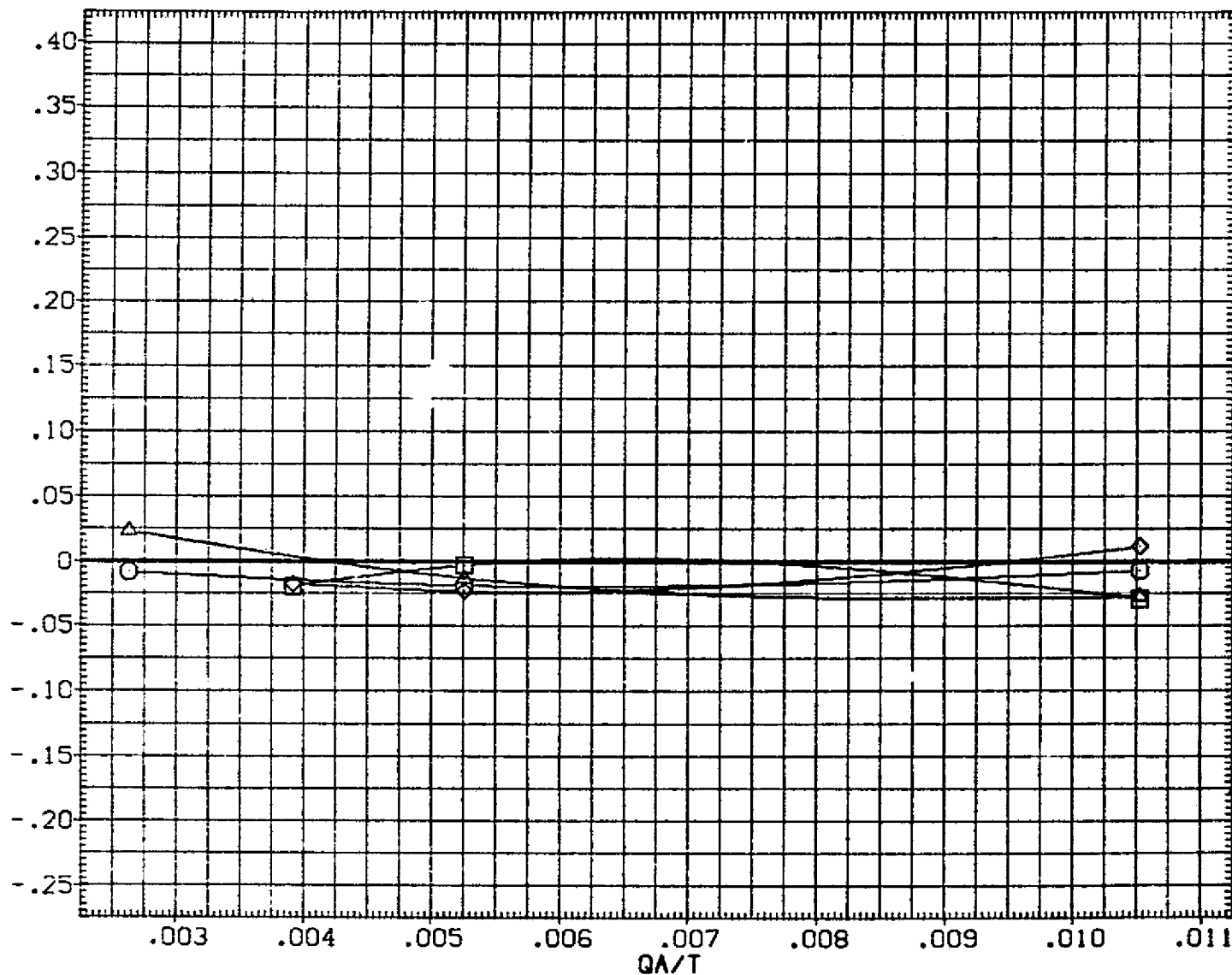


FIGURE 95. AREA RATIO EFFECTS, L/H SIDE FIRING JETS

(E) ALPHA = .00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA079)	01N33 LARC CFHT 118 (MA-22)
(SJA080)	01N37 LARC CFHT 118 (MA-22)
(SJA081)	01N61 LARC CFHT 118 (MA-22)
(SJA005)	01N85 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BOFLAP	BETA	REFERENCE INFORMATION
.000	2.000	.000	.000	SREF 2690.0000 SQ. FT.
.000	2.000	.000	.000	LREF 474.8000 INCHES
.000	2.000	.000	.000	BREF 936.6800 INCHES
.000	2.000	.000	.000	XMRP 1076.7000 IN. X0
				YMRP .0000 IN. Y0
				ZMRP 375.0000 IN. Z0
				SCALE .0100

RCS JET AMPLIFICATION FACTOR - PITCH, NCPM)

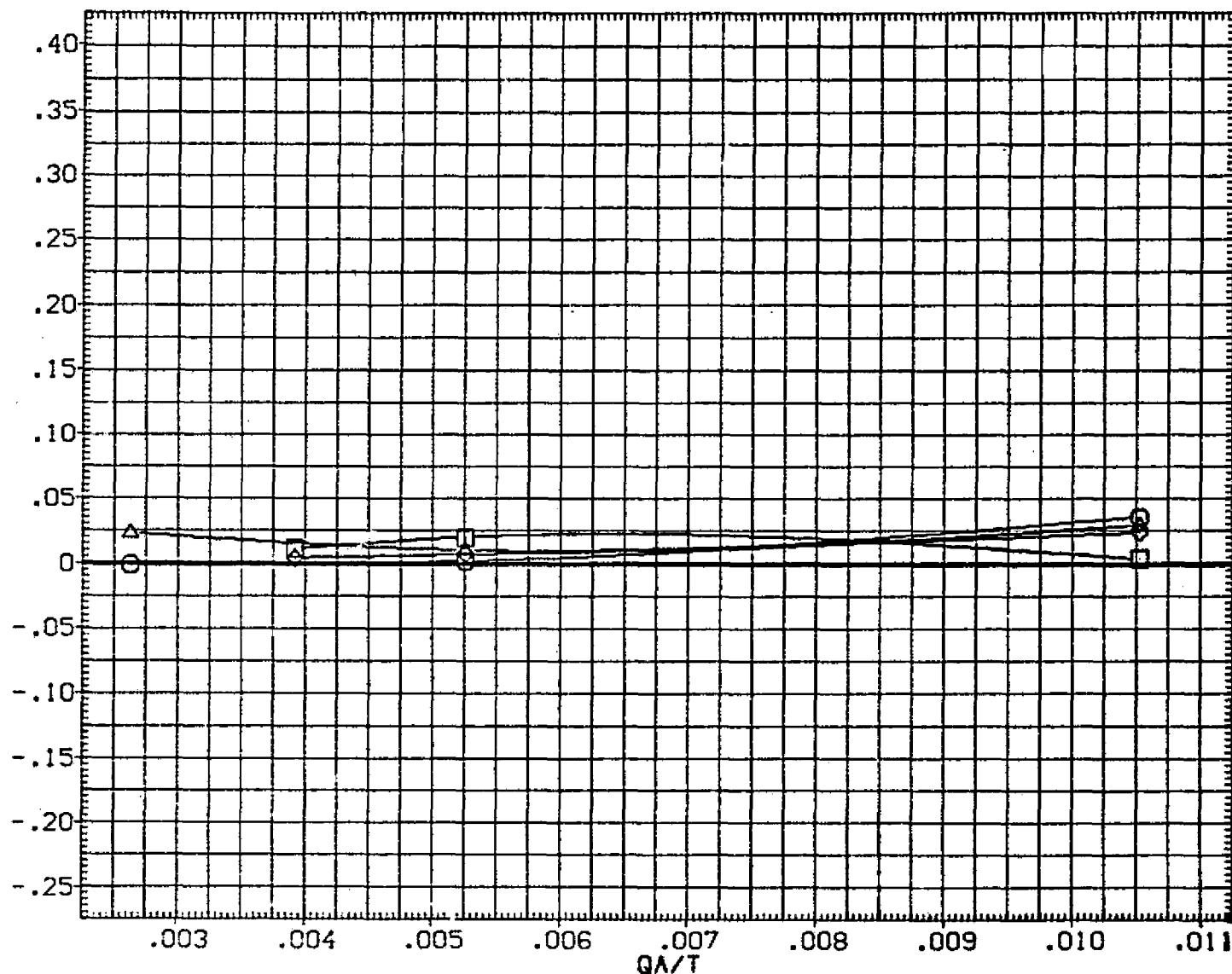


FIGURE 95. AREA RATIO EFFECTS, L/H SIDE FIRING JETS
(F)ALPHA = 2.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA079)	Q1N33 LARC CFHT 118 (MA-22)
(SJA080)	Q1N37 LARC CFHT 118 (MA-22)
(SJA081)	Q1N61 LARC CFHT 118 (MA-22)
(SJA005)	Q1N85 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BD FLAP	BETA	REFERENCE INFORMATION
.000	2.000	.000	.000	SREF 2690.0000 SQ. FT.
.000	2.000	.000	.000	LREF 471.8000 INCHES
.000	2.000	.000	.000	BREF 936.6800 INCHES
.000	2.000	.000	.000	XMRP 1076.7000 IN. X0
				YMRP .0000 IN. Y0
				ZMRP 375.0000 IN. Z0
				SCALE .0100

RCS JET AMPLIFICATION FACTOR - PITCH, N(PM)

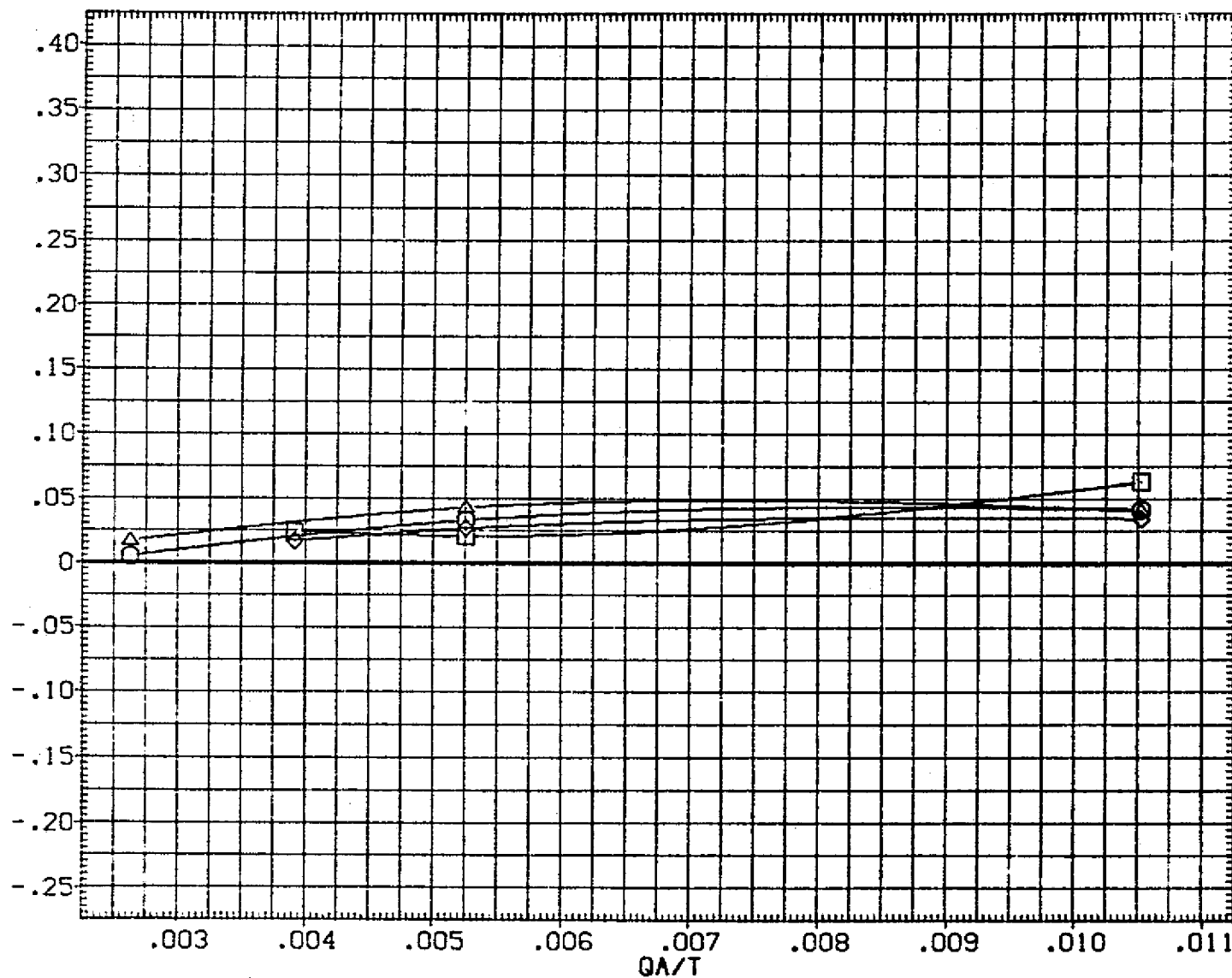


FIGURE 95. AREA RATIO EFFECTS, L/H SIDE FIRING JETS
(G) ALPHA = 4.00

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION
(SJA079)	○	01N33 LARC CFHT 118 (MA-22)
(SJA080)	□	01N37 LARC CFHT 118 (MA-22)
(SJA081)	◇	01N61 LARC CFHT 118 (MA-22)
(SJA005)	△	01N85 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BOFLAP	BETA	REFERENCE INFORMATION		
.000	2.000	.000	.000	SREF	2690.0000	50. FT.
.000	2.000	.000	.000	LREF	474.8000	INCHES
.000	2.000	.000	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - PITCH, NCPM)

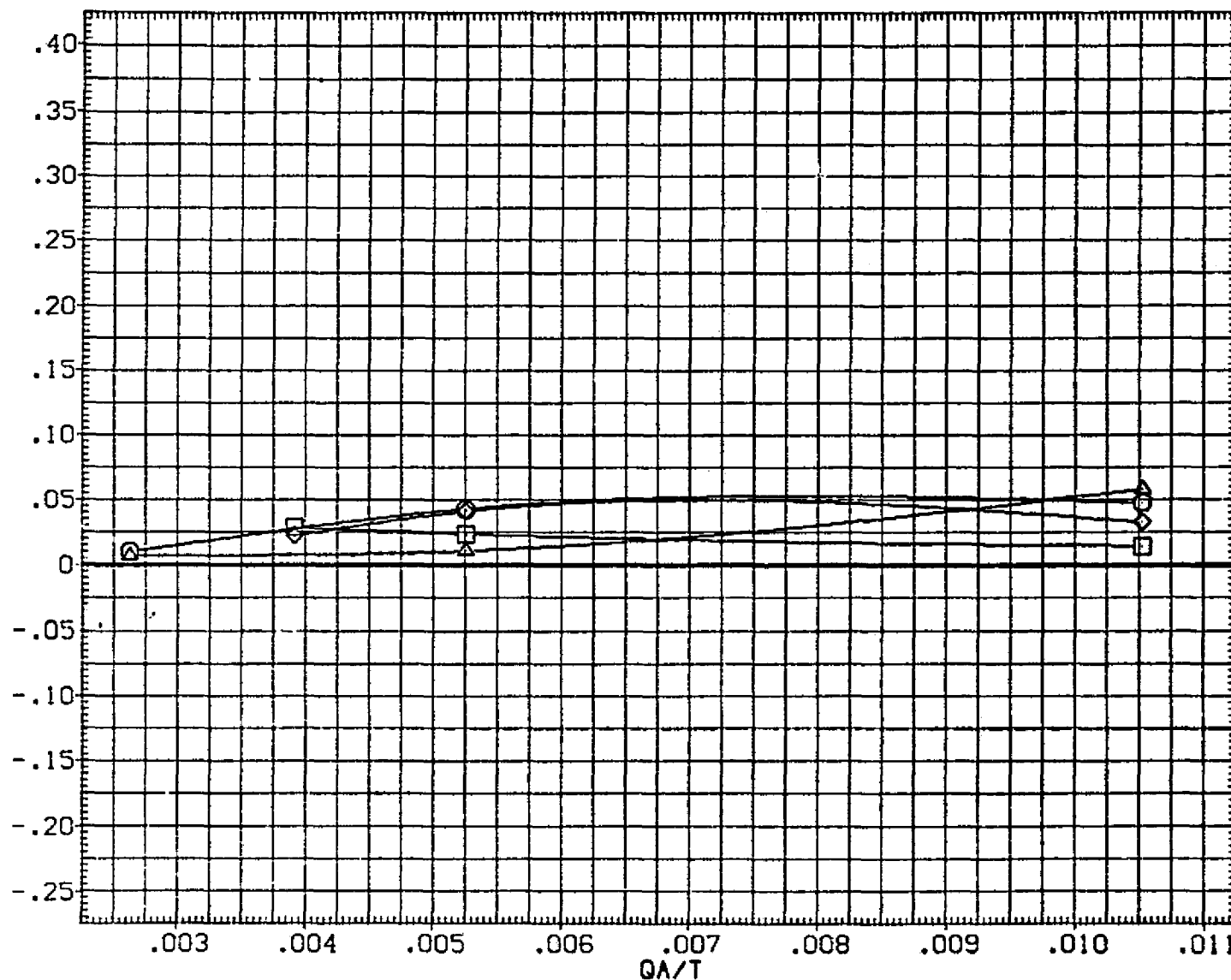


FIGURE 95. AREA RATIO EFFECTS, L/H SIDE FIRING JETS

(H) ALPHA = 6.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA079)	01N33 LARC CFHT 118 (MA-22)
(SJA080)	01N37 LARC CFHT 118 (MA-22)
(SJA081)	01N61 LARC CFHT 118 (MA-22)
(SJA005)	01N85 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BOFLAP	BETA	REFERENCE INFORMATION
.000	2.000	.000	.000	SREF 2690.0000 SQ. FT.
.000	2.000	.000	.000	LREF 474.8000 INCHES
.000	2.000	.000	.000	BREF 936.6800 INCHES
.000	2.000	.000	.000	XMRP 1076.7000 IN. X0
				YMRP .0000 IN. Y0
				ZMRP 375.0000 IN. Z0
				SCALE .0100

RCS JET AMPLIFICATION FACTOR - PITCH, NCPM)

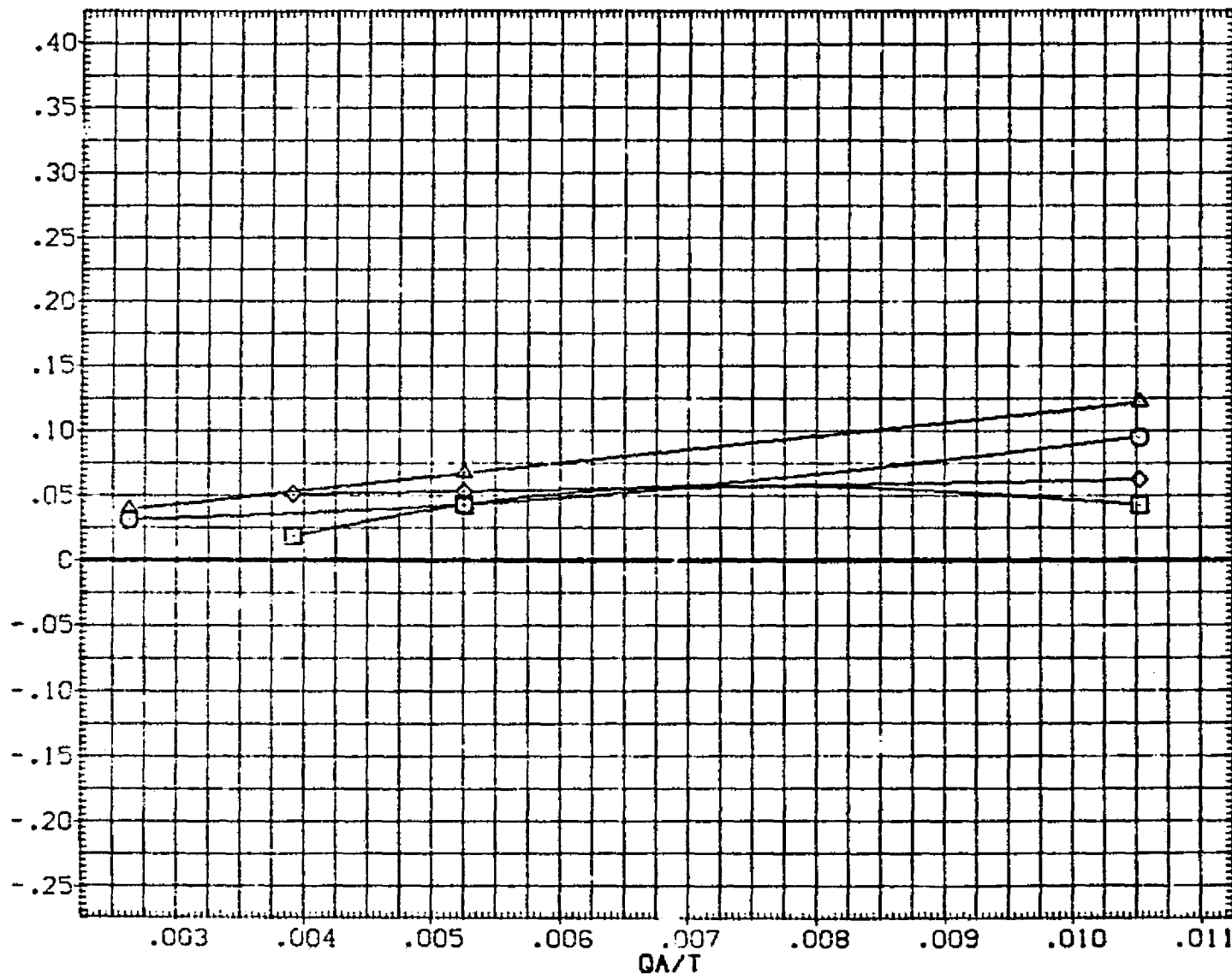


FIGURE 95. AREA RATIO EFFECTS, L/H SIDE FIRING JETS

(1) ALPHA = 8.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA079)	01N33 LARC CFHT 118 (MA-22)
(SJA080)	01N37 LARC CFHT 118 (MA-22)
(SJA081)	01N61 LARC CFHT 118 (MA-22)
(SJA005)	01N85 LARC CFHT 118 (MA-22)

ELEVON	NO.JET	BDFLAP	BETA	REFERENCE INFORMATION
.000	2.000	.000	.000	SREF 2690.0000 SQ.FT.
.000	2.000	.000	.000	LREF 474.8000 INCHES
.000	2.000	.000	.000	BREF 936.6800 INCHES
.000	2.000	.000	.000	XMRP 1076.7000 IN. X0
				YMRP .0000 IN. Y0
				ZMRP 375.0000 IN. Z0
				SCALE .0100

RCS JET AMPLIFICATION FACTOR - PITCH. N(PM)

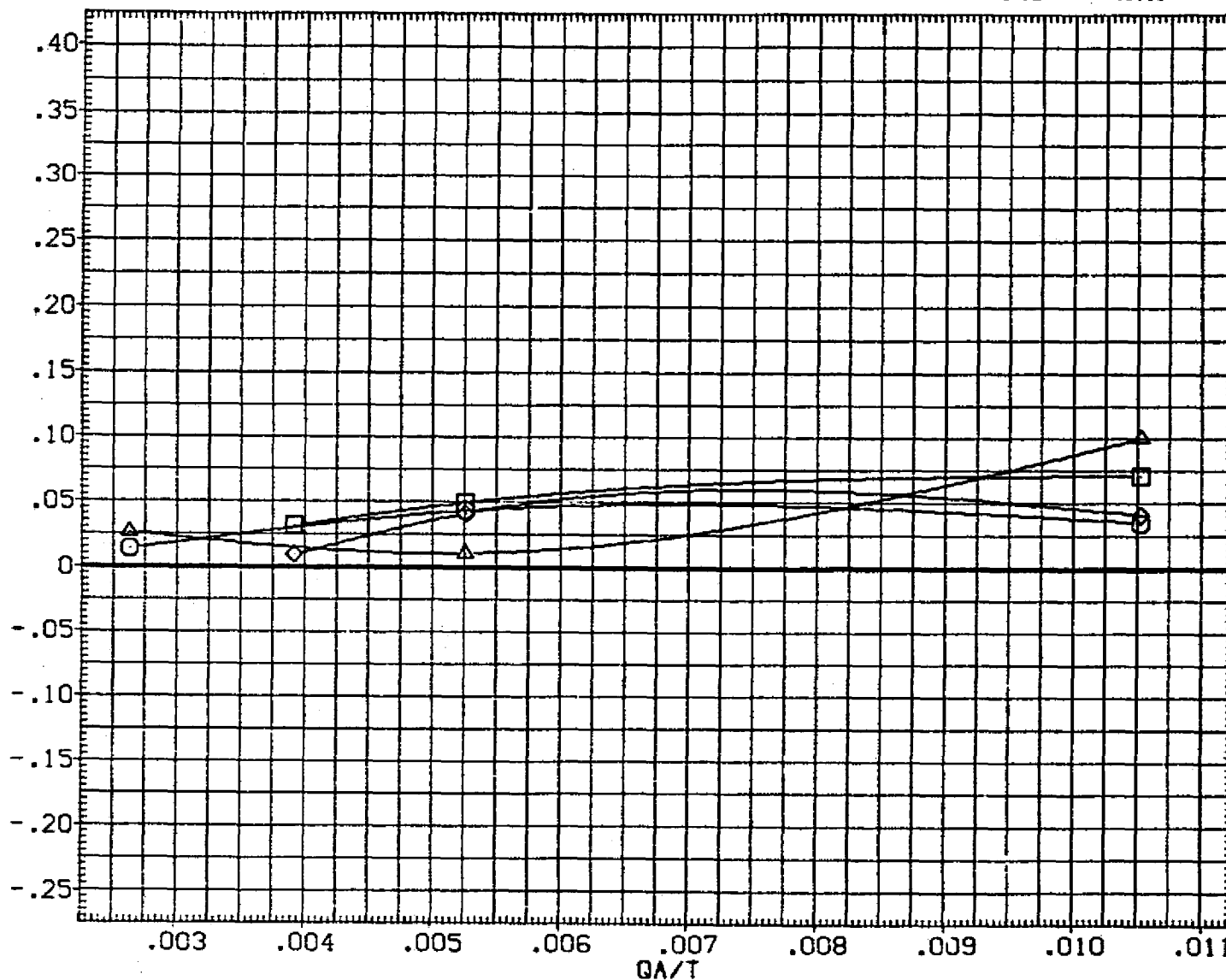


FIGURE 95. AREA RATIO EFFECTS, L/H SIDE FIRING JETS
(J)ALPHA = 10.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA079)	01N33 LARC CFHT 118 (MA-22)
(SJA080)	01N37 LARC CFHT 118 (MA-22)
(SJA081)	01N61 LARC CFHT 118 (MA-22)
(SJA005)	01N85 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BOFLAP	BETA	REFERENCE INFORMATION
.000	2.000	.000	.000	SREF 2690.0000 SQ. FT.
.000	2.000	.000	.000	LREF 474.8000 INCHES
.000	2.000	.000	.000	BREF 936.6800 INCHES
.000	2.000	.000	.000	XMRP 1076.7000 IN. X0
				YMRP .0000 IN. Y0
				ZMRP 375.0000 IN. Z0
				SCALE .0100

RCS JET AMPLIFICATION FACTOR - PITCH, N(PM)

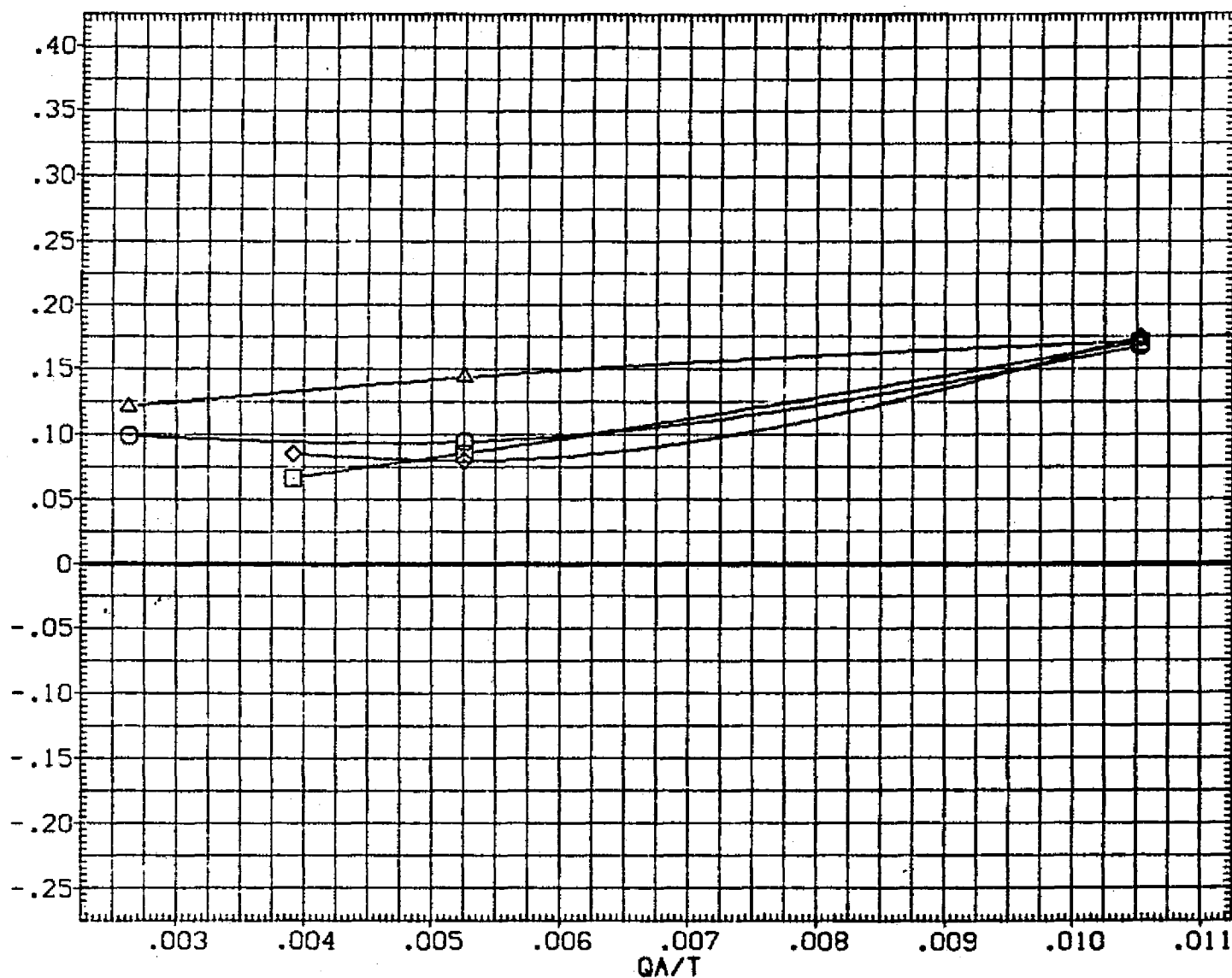


FIGURE 95. AREA RATIO EFFECTS, L/H SIDE FIRING JETS
(K) ALPHA = 15.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA079)	01N33 LARC CFHT 118 (MA-22)
(SJA080)	01N37 LARC CFHT 118 (MA-22)
(SJA081)	01N61 LARC CFHT 118 (MA-22)
(SJA005)	01N85 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BOFLAP	BETA	REFERENCE INFORMATION		
.000	2.000	.000	.000	SREF	2690.0000	SQ. FT.
.000	2.000	.000	.000	LREF	474.8000	INCHES
.000	2.000	.000	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - PITCH, NCPM

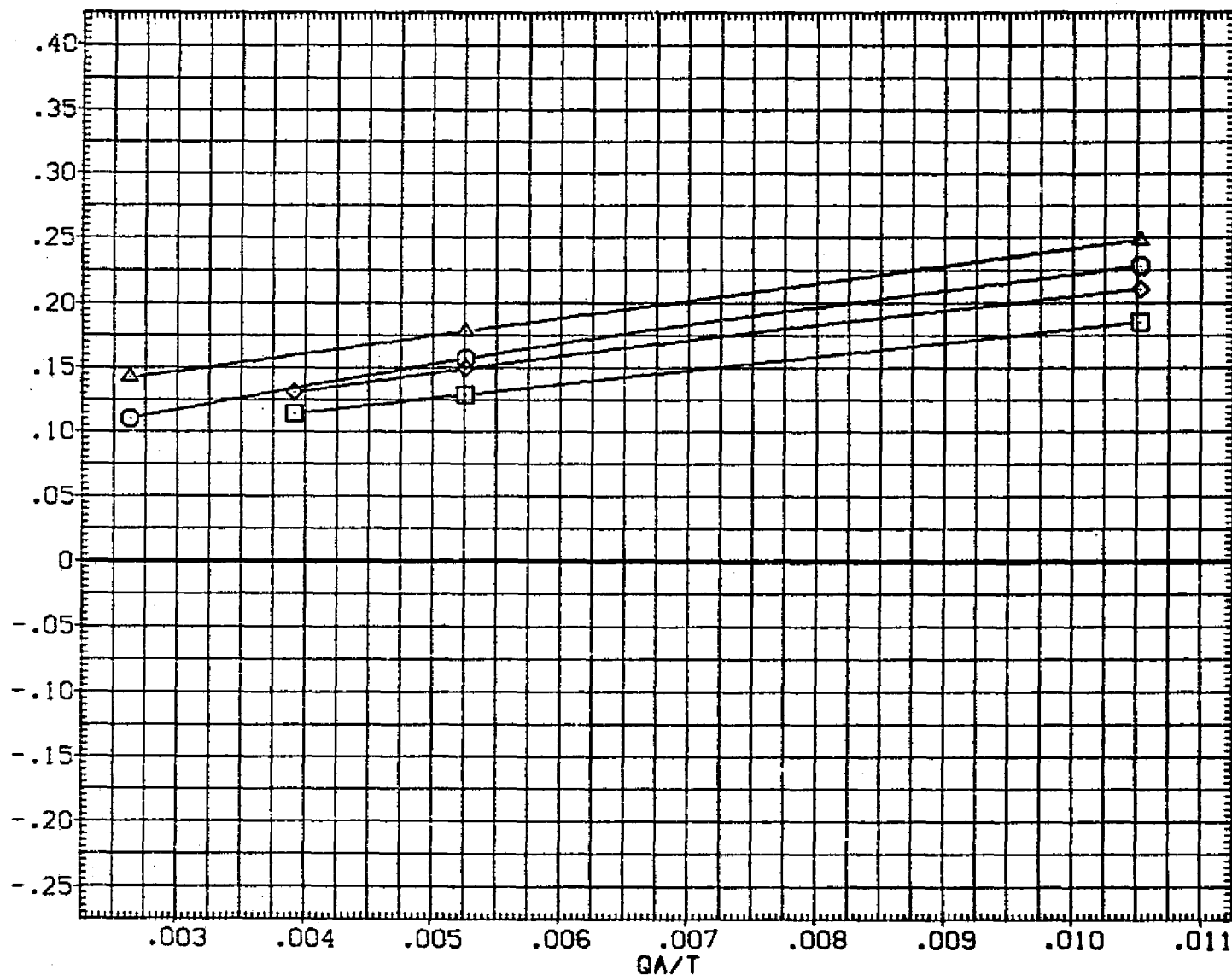


FIGURE 95. AREA RATIO EFFECTS, L/H SIDE FIRING JETS
(L) ALPHA = 20.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA079)	01N33 LARC CFHT 118 (MA-22)
(SJA080)	01N37 LARC CFHT 118 (MA-22)
(SJA081)	01N61 LARC CFHT 118 (MA-22)
(SJA005)	01N85 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BOFLAP	BETA	REFERENCE INFORMATION
.000	2.000	.000	.000	SREF 2690.0000 SQ. FT.
.000	2.000	.000	.000	LREF 474.8000 INCHES
.000	2.000	.000	.000	BREF 936.6800 INCHES
.000	2.000	.000	.000	XMRP 1076.7000 IN. X0
				YMRP .0000 IN. Y0
				ZMRP 375.0000 IN. Z0
				SCALE .0100

RCS JET AMPLIFICATION FACTOR - PITCH, NCPM

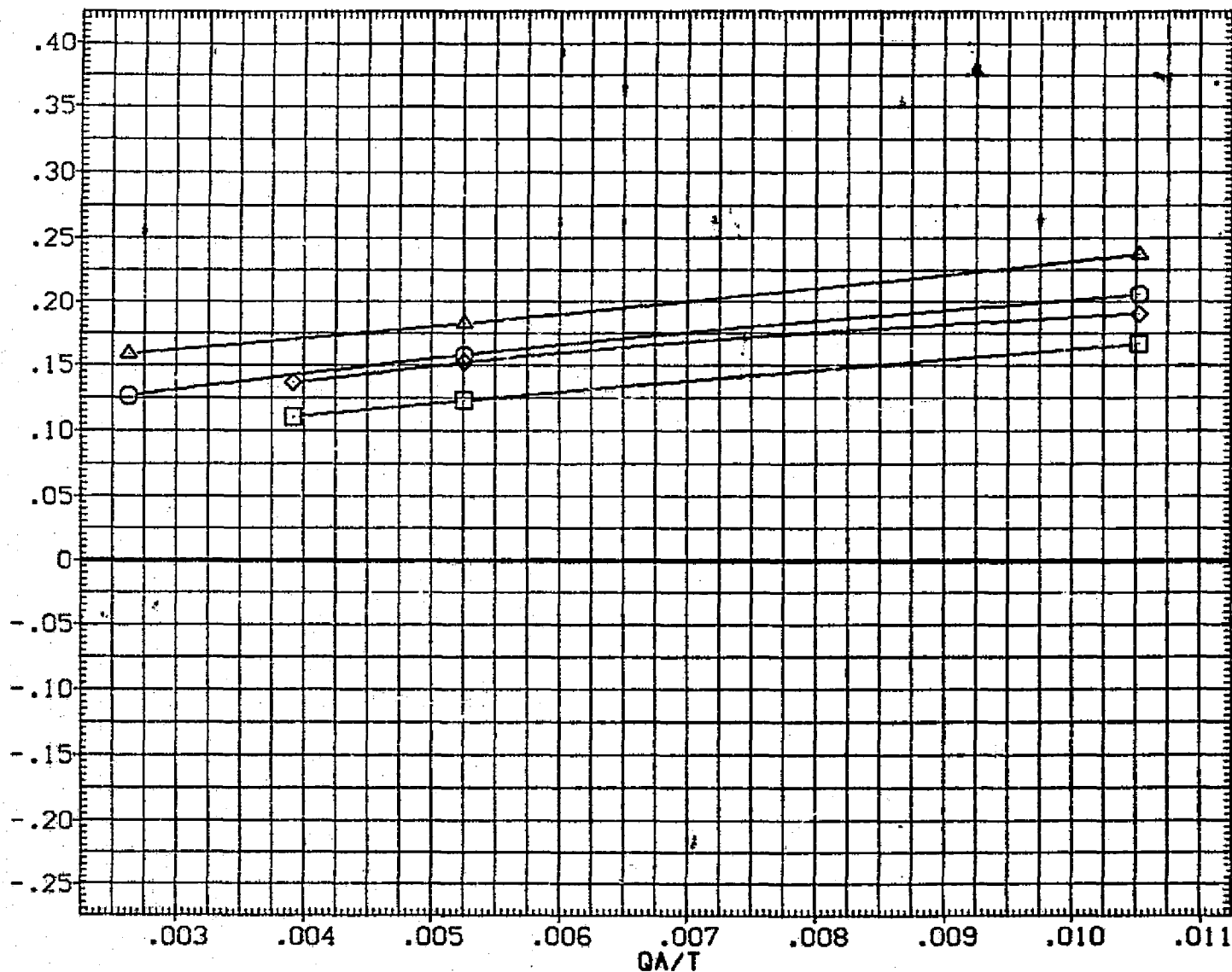


FIGURE 95. AREA RATIO EFFECTS, L/H SIDE FIRING JETS
(M)ALPHA = 25.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA079)	01N33 LARC CFHT 118 (MA-22)
(SJA080)	01N37 LARC CFHT 118 (MA-22)
(SJA081)	01N61 LARC CFHT 118 (MA-22)
(SJA005)	01N85 LARC CFHT 118 (MA-22)

ELEVON	NO.JET	BDFLAP	BETA	REFERENCE INFORMATION
.000	2.000	.000	.000	SREF 2690.0000 SQ.FT.
.000	2.000	.000	.000	LREF 474.8000 INCHES
.000	2.000	.000	.000	BREF 936.6800 INCHES
.000	2.000	.000	.000	XMRP 1076.7000 IN. X0
.000	2.000	.000	.000	YMRP .0000 IN. Y0
				ZMRP 375.0000 IN. Z0
				SCALE .0100

RCS JET AMPLIFICATION FACTOR - PITCH, NCPM)

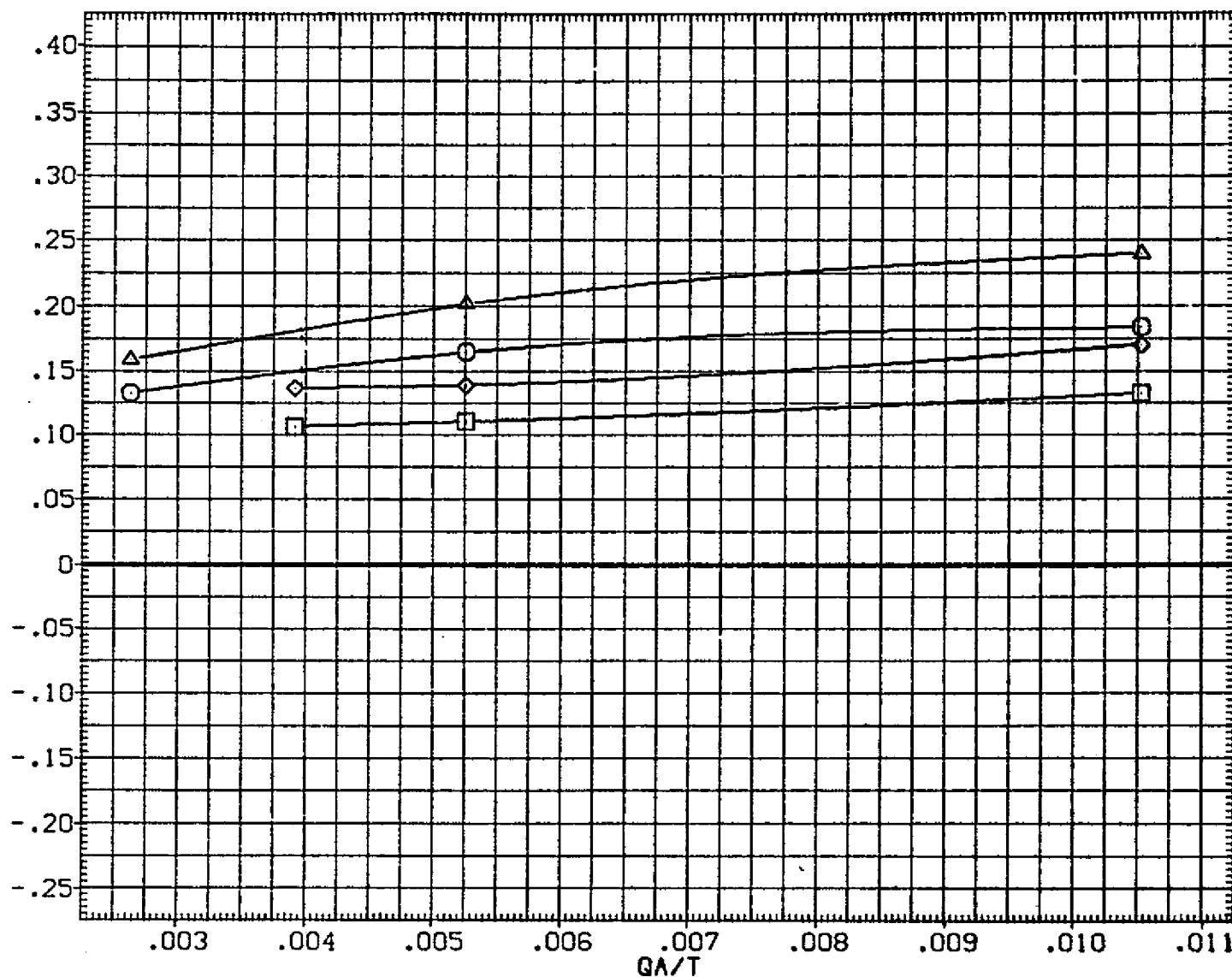


FIGURE 95. AREA RATIO EFFECTS, L/H SIDE FIRING JETS

(N)ALPHA = 30.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA079)	01N33 LARC CFHT 118 (MA-22)
(SJA080)	01N37 LARC CFHT 118 (MA-22)
(SJA081)	01N61 LARC CFHT 118 (MA-22)
(SJA005)	01N85 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BD FLAP	BETA	REFERENCE INFORMATION
.000	2.000	.000	.000	SREF 2690.0000 SQ. FT.
.000	2.000	.000	.000	LREF 474.8000 INCHES
.000	2.000	.000	.000	BREF 936.6800 INCHES
.000	2.000	.000	.000	XMRP 1076.7000 IN. XO
				YMRP .0000 IN. YO
				ZMRP 375.0000 IN. ZO
				SCALE .0100

RCS JET AMPLIFICATION FACTOR - PITCH, N(PM)

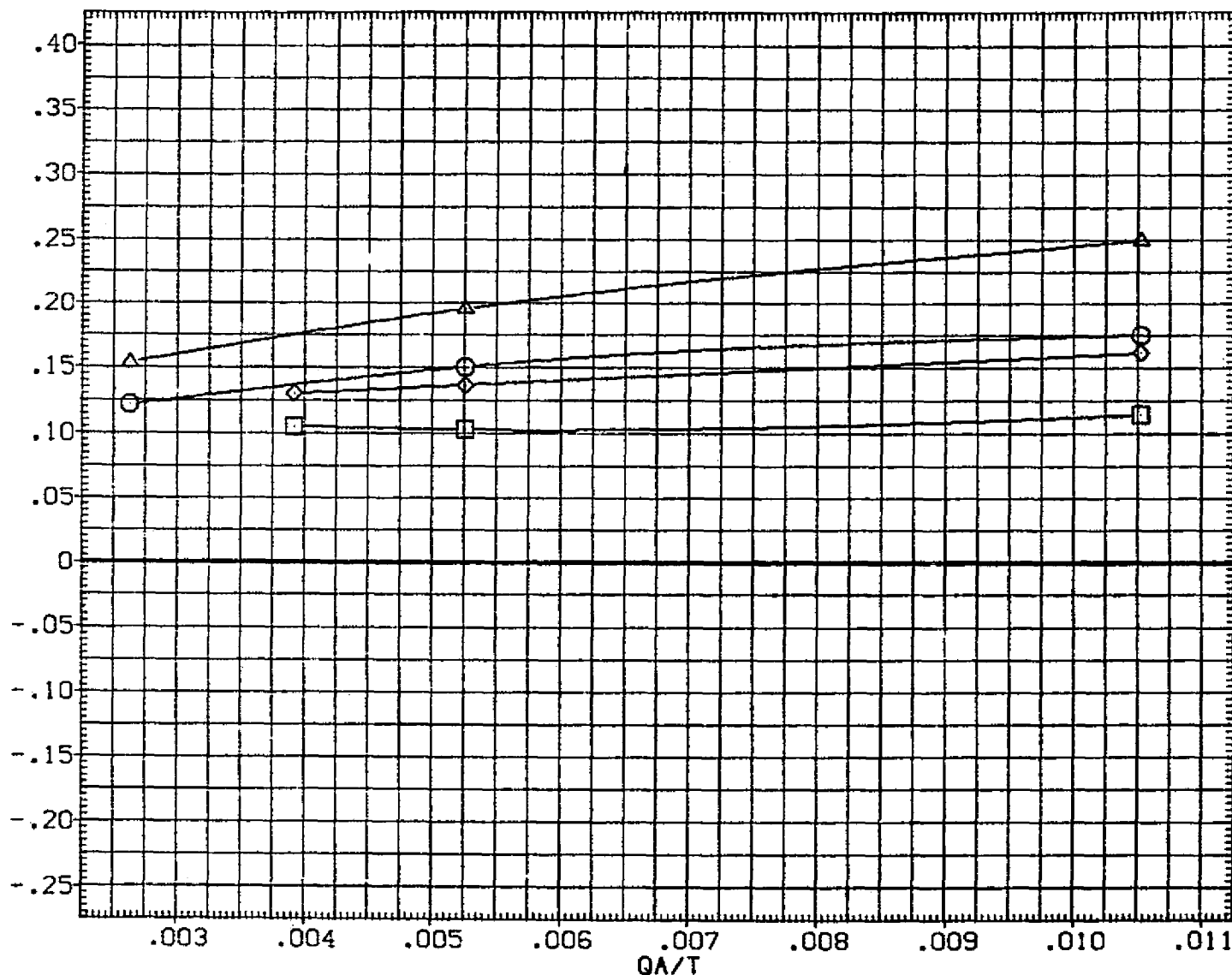


FIGURE 95. AREA RATIO EFFECTS, L/H SIDE FIRING JETS
(O) ALPHA = 35.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA079)	01N33 LARC CFHT 118 (MA-22)
(SJA080)	01N37 LARC CFHT 118 (MA-22)
(SJA081)	01N61 LARC CFHT 118 (MA-22)
(SJA005)	01N85 LARC CFHT 118 (MA-22)

ELEVON	NO.JET	BDFLAP	BETA	REFERENCE INFORMATION		
.000	2.000	.000	.000	SREF	2690.0000	50.FT.
.000	2.000	.000	.000	LREF	474.8000	INCHES
.000	2.000	.000	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XMRP	1876.7000	IN. X0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - AXIAL FORCE, N(AF)

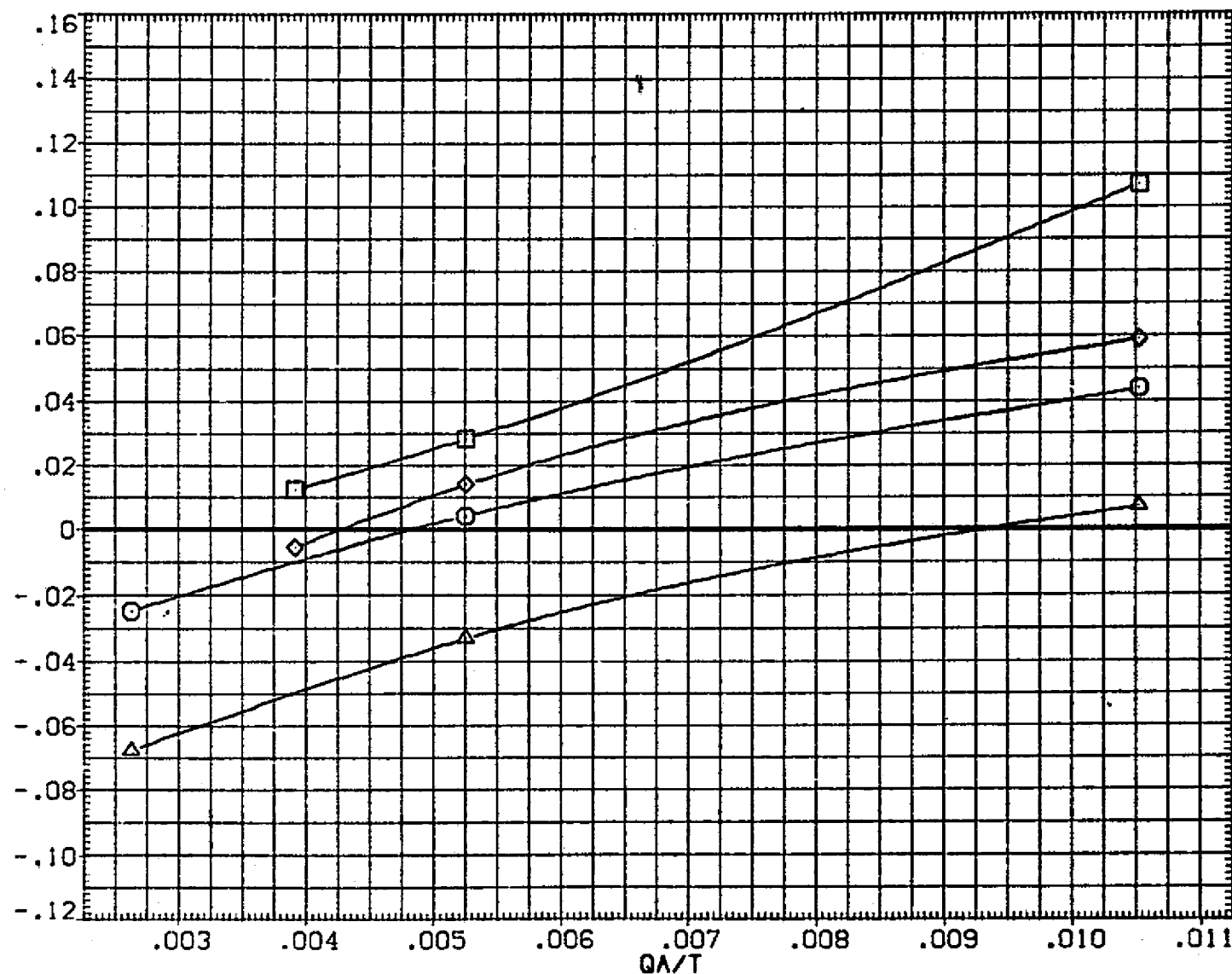


FIGURE 95. AREA RATIO EFFECTS, L/H SIDE FIRING JETS

(A) ALPHA = -8.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA079) □	01N33 LARC CFHT 118 (MA-22)
(SJA080) ◇	01N37 LARC CFHT 118 (MA-22)
(SJA081) △	01N61 LARC CFHT 118 (MA-22)
(SJA005) △	01N85 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BOFLAP	BETA	REFERENCE INFORMATION		
.000	2.000	.000	.000	SREF	2690.0000	50. FT.
.000	2.000	.000	.000	LREF	474.8000	INCHES
.000	2.000	.000	.000	BREF	936.6000	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - AXIAL FORCE, N(AF)

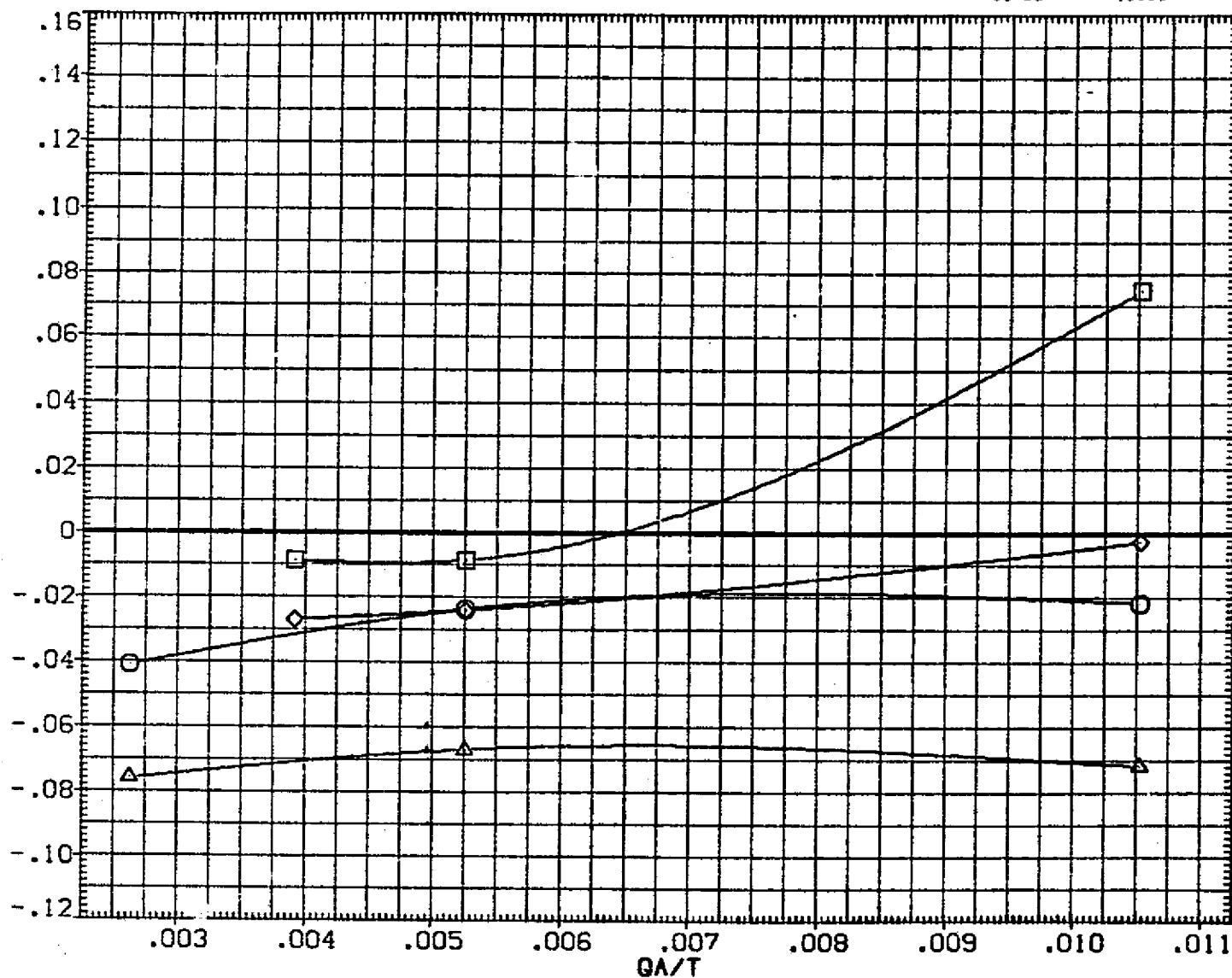


FIGURE 95. AREA RATIO EFFECTS, L/H SIDE FIRING JETS
(B) ALPHA = -6.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA079)	01N33 LARC CFHT 118 (MA-22)
(SJA080)	01N37 LARC CFHT 118 (MA-22)
(SJA081)	01N61 LARC CFHT 118 (MA-22)
(SJA005)	01N85 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BOFLAP	BETA	REFERENCE INFORMATION
.000	2.000	.000	.000	SREF 2690.0000 SQ. FT.
.000	2.000	.000	.000	LREF 474.8000 INCHES
.000	2.000	.000	.000	BREF 936.6800 INCHES
.000	2.000	.000	.000	XMRP 1076.7000 IN. X0
				YMRP .0000 IN. Y0
				ZMRP 375.0000 IN. Z0
				SCALE .0100

RCS JET AMPLIFICATION FACTOR - AXIAL FORCE, N(AF)

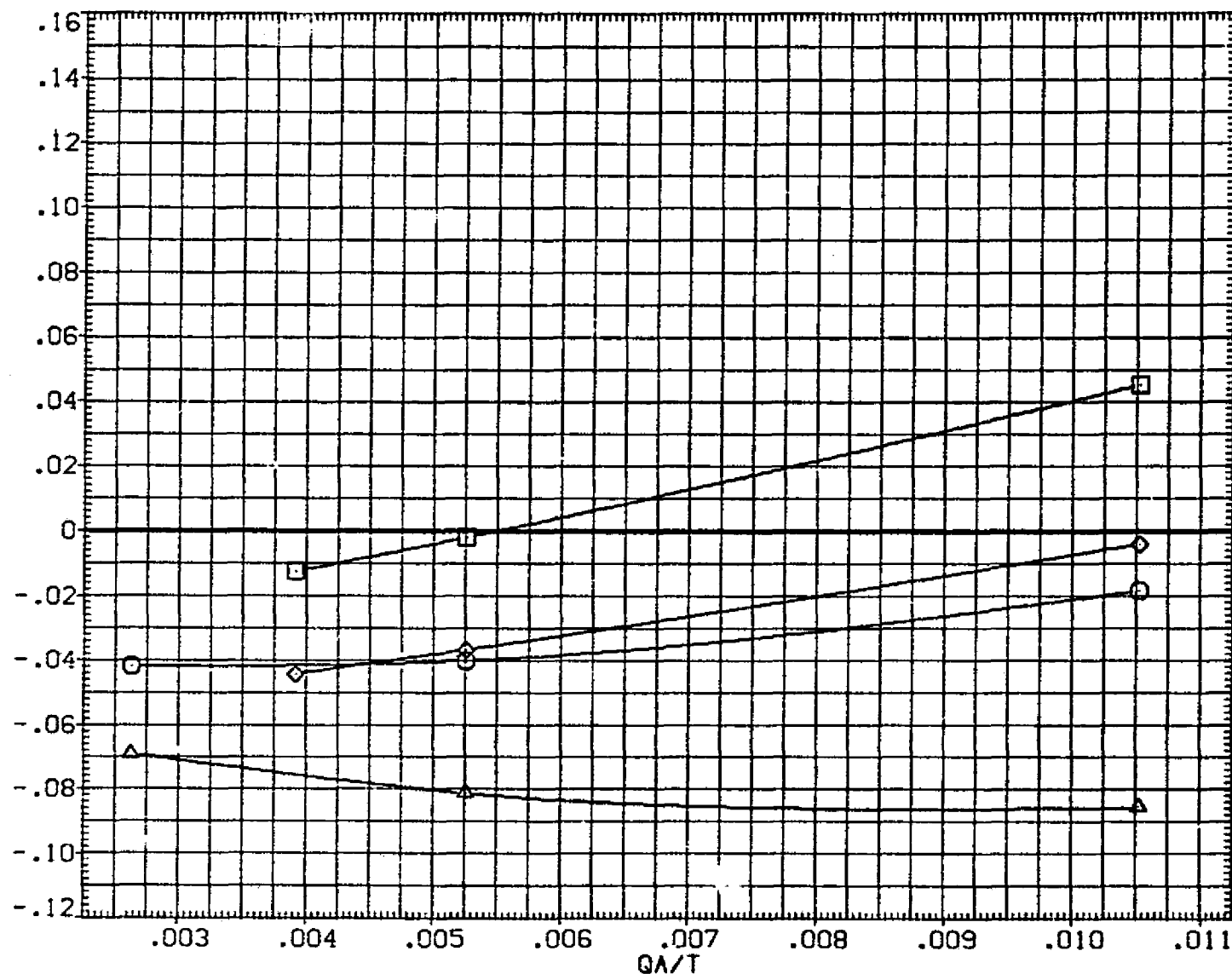


FIGURE 95. AREA RATIO EFFECTS, L/H SIDE FIRING JETS
(C) ALPHA = -4.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA079)	01N33 LARC CFHT 118 (MA-22)
(SJA080)	01N37 LARC CFHT 118 (MA-22)
(SJA081)	01N61 LARC CFHT 118 (MA-22)
(SJA005)	01N85 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BOFLAP	BETA	REFERENCE INFORMATION
.000	2.000	.000	.000	SREF 2690.0000 SQ. FT.
.000	2.000	.000	.000	LREF 474.8000 INCHES
.000	2.000	.000	.000	BREF 936.6800 INCHES
.000	2.000	.000	.000	XM RP 1076.7000 IN. X0
				YM RP .0000 IN. Y0
				ZM RP 375.0000 IN. Z0
				SCALE .0100

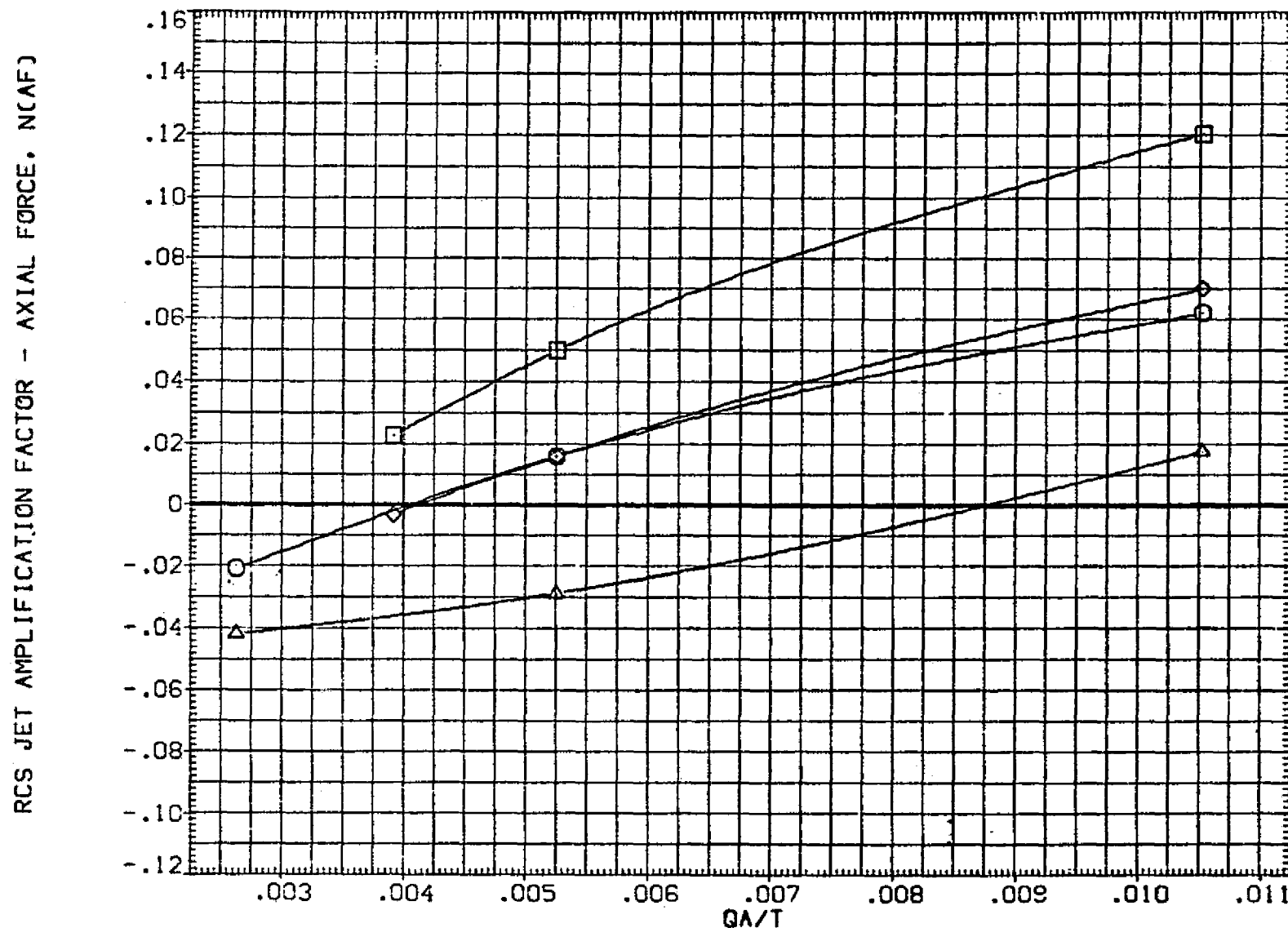


FIGURE 95. AREA RATIO EFFECTS, L/H SIDE FIRING JETS
(D) ALPHA = -2.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA079)	01N33 LARC CFHT 118 (MA-22)
(SJA080)	01N37 LARC CFHT 118 (MA-22)
(SJA081)	01N61 LARC CFHT 118 (MA-22)
(SJA005)	01N95 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BOFLAP	BETA	REFERENCE INFORMATION		
.000	2.000	.000	.000	SREF	2690.0000	50. FT.
.000	2.000	.000	.000	LREF	474.8000	INCHES
.000	2.000	.000	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - AXIAL FORCE, N(AF)

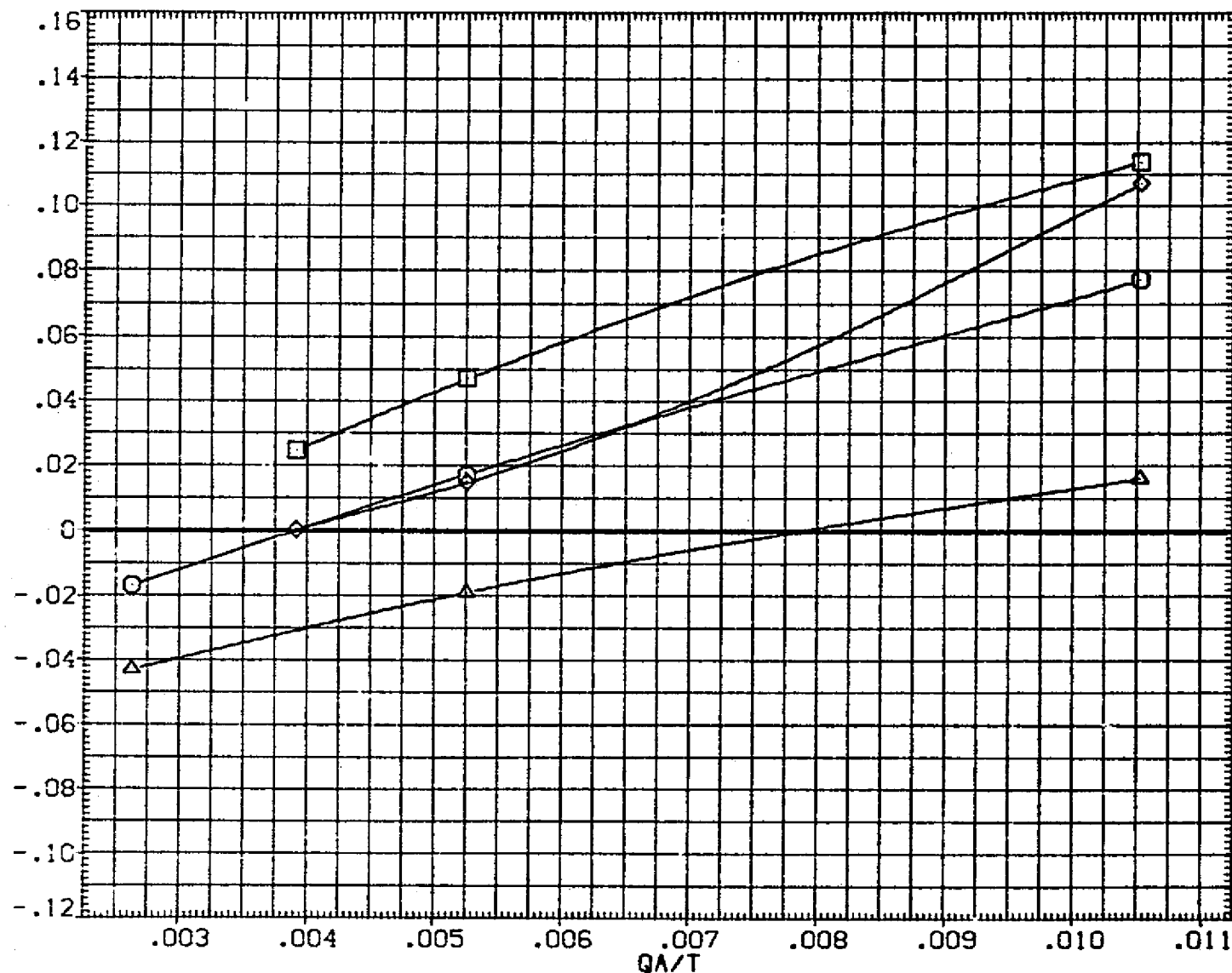


FIGURE 95. AREA RATIO EFFECTS, L/H SIDE FIRING JETS
(E) ALPHA = .00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA079)	Q1N33 LARC CFHT 118 (MA-22)
(SJA080)	Q1N37 LARC CFHT 118 (MA-22)
(SJA081)	Q1N61 LARC CFHT 118 (MA-22)
(SJA005)	Q1N85 LARC CFHT 118 (MA-22)

ELEVON	NO.JET	BOFLAP	BETA	REFERENCE INFORMATION		
.000	2.000	.000	.000	SREF	2690.0000	50.FT.
.000	2.000	.000	.000	LREF	474.8000	INCHES
.000	2.000	.000	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - AXIAL FORCE, NCAF)

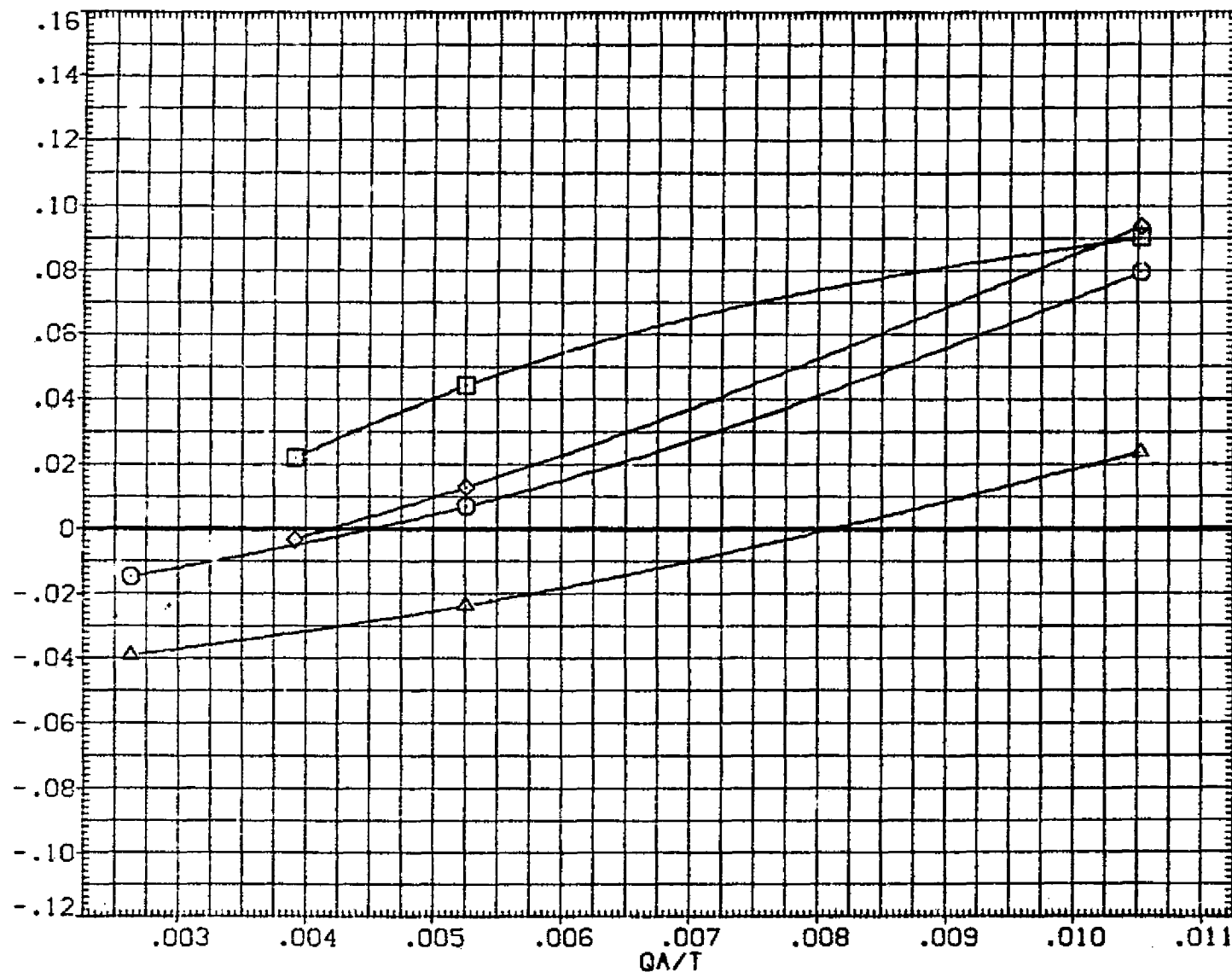


FIGURE 95. AREA RATIO EFFECTS, L/H SIDE FIRING JETS

(F)ALPHA = 2.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA079)	□ 01N33 LARC CFHT 118 (MA-22)
(SJA080)	◇ 01N37 LARC CFHT 118 (MA-22)
(SJA081)	○ 01N61 LARC CFHT 118 (MA-22)
(SJA005)	△ 01N85 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BD FLAP	BETA	REFERENCE INFORMATION		
.000	2.000	.000	.000	SREF	2690.0000	50. FT.
.000	2.000	.000	.000	LREF	474.8000	INCHES
.000	2.000	.000	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - AXIAL FORCE, N(AF)

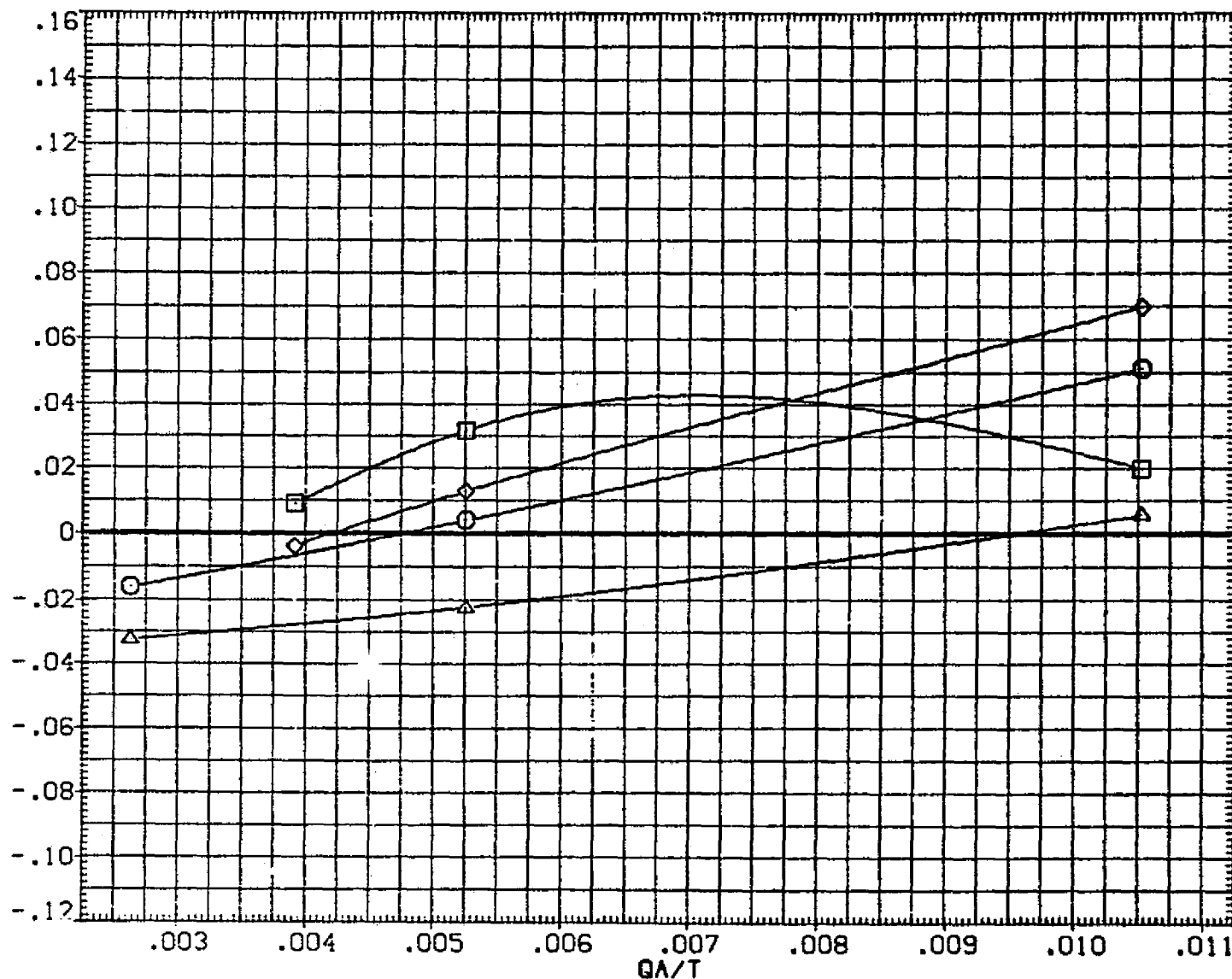


FIGURE 95. AREA RATIO EFFECTS, L/H SIDE FIRING JETS
(G) ALPHA = 4.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA079)	QIN33 LARC CFHT 118 (MA-22)
(SJA080)	QIN37 LARC CFHT 118 (MA-22)
(SJA081)	QIN61 LARC CFHT 118 (MA-22)
(SJA005)	QIN85 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BD FLAP	BETA	REFERENCE INFORMATION
.000	2.000	.000	.000	SREF 2690.0000 SQ. FT.
.000	2.000	.000	.000	LREF 474.8000 INCHES
.000	2.000	.000	.000	BREF 936.6800 INCHES
.000	2.000	.000	.000	XMRP 1076.7000 IN. X0
				YMRP .0000 IN. Y0
				ZMRP 375.0000 IN. Z0
				SCALE .0100

RCS JET AMPLIFICATION FACTOR - AXIAL FORCE, N(AF)

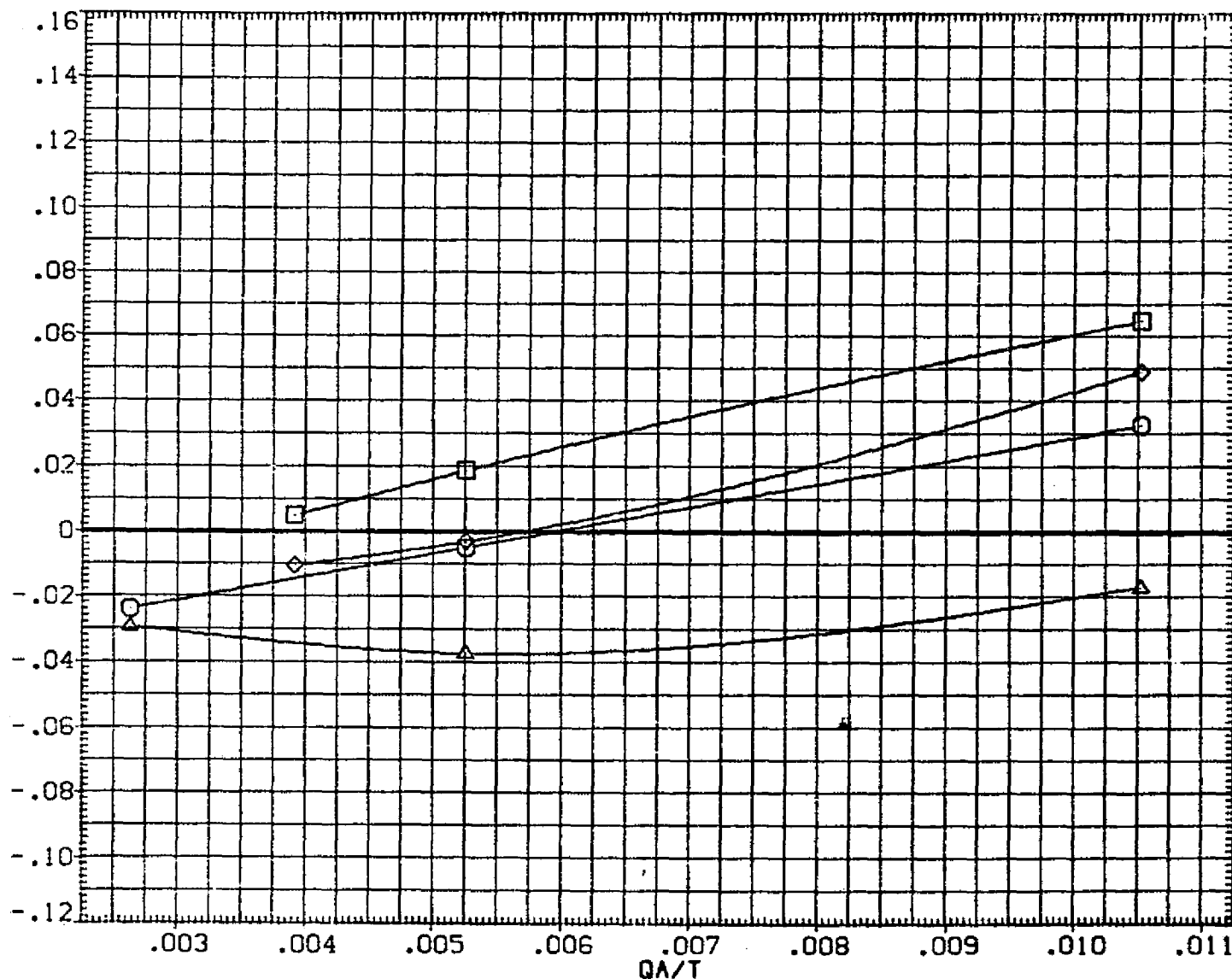


FIGURE 95. AREA RATIO EFFECTS, L/H SIDE FIRING JETS

(H) ALPHA = 6.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA079)	01N33 LARC CFHT 118 (MA-22)
(SJA080)	01N37 LARC CFHT 118 (MA-22)
(SJA081)	01N61 LARC CFHT 118 (MA-22)
(SJA005)	01N85 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BOFLAP	BETA	REFERENCE INFORMATION
.000	2.000	.000	.000	SREF 2690.0000 SQ. FT.
.000	2.000	.000	.000	LREF 474.8000 INCHES
.000	2.000	.000	.000	BREF 936.6800 INCHES
.000	2.000	.000	.000	XMRP 1076.7000 IN. X0
.000	2.000	.000	.000	YMRP .0000 IN. Y0
.000	2.000	.000	.000	ZMRP 375.0000 IN. Z0
.000	2.000	.000	.000	SCALE .0100

RCS JET AMPLIFICATION FACTOR - AXIAL FORCE, N(AF)

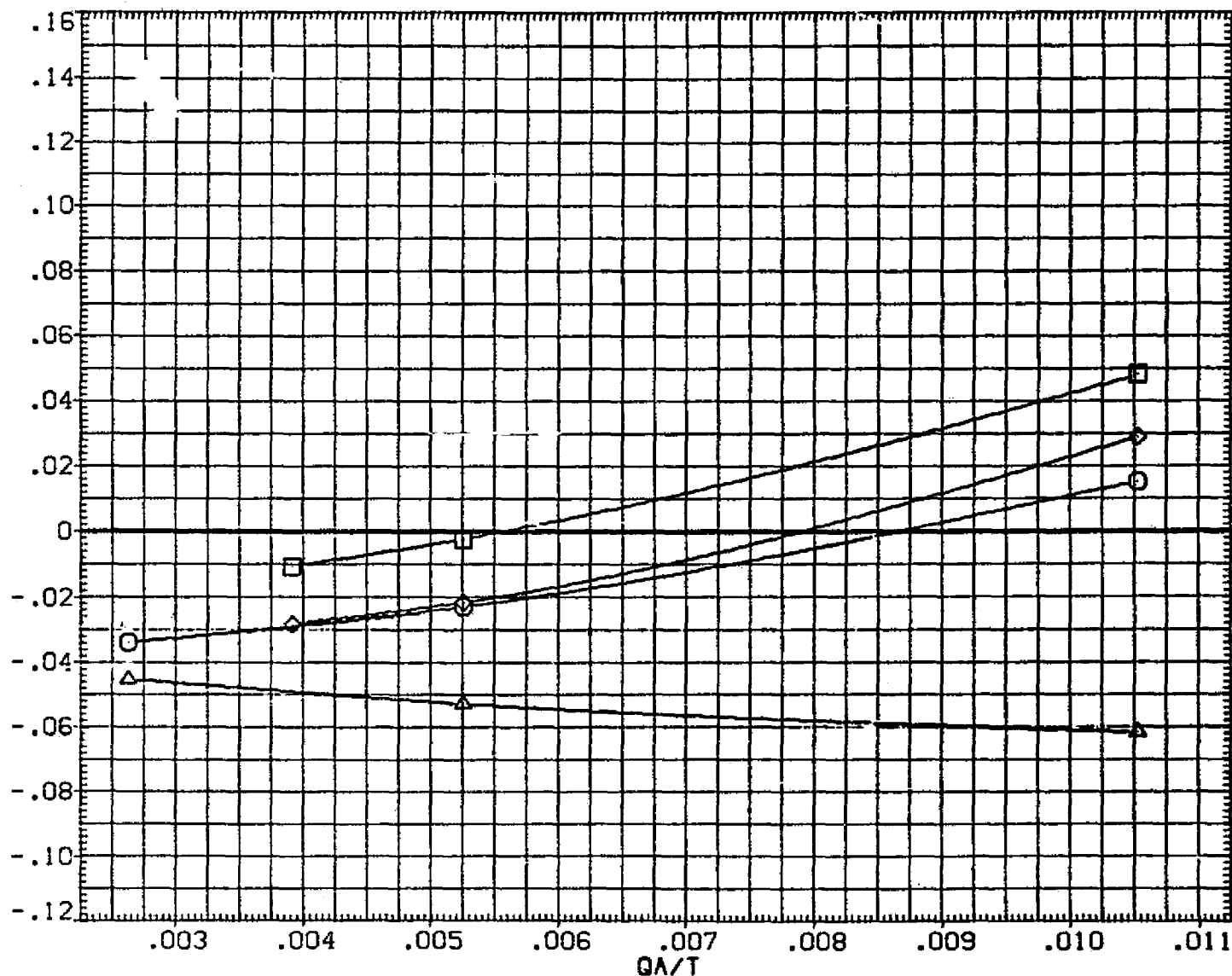


FIGURE 95. AREA RATIO EFFECTS, L/H SIDE FIRING JETS

(I) ALPHA = 8.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA079)	01N33 LARC CFHT 118 (MA-22)
(SJA080)	01N37 LARC CFHT 118 (MA-22)
(SJA081)	01N61 LARC CFHT 118 (MA-22)
(SJA005)	01N85 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BD FLAP	BETA	REFERENCE INFORMATION
.000	2.000	.000	.000	SREF 2690.0000 SQ. FT.
.000	2.000	.000	.000	LREF 474.8000 INCHES
.000	2.000	.000	.000	BREF 936.6800 INCHES
.000	2.000	.000	.000	XMRP 1076.7000 IN. X0
				YMRP .0000 IN. Y0
				ZMRP 375.0000 IN. Z0
				SCALE .0100

RCS JET AMPLIFICATION FACTOR - AXIAL FORCE, N(AF)

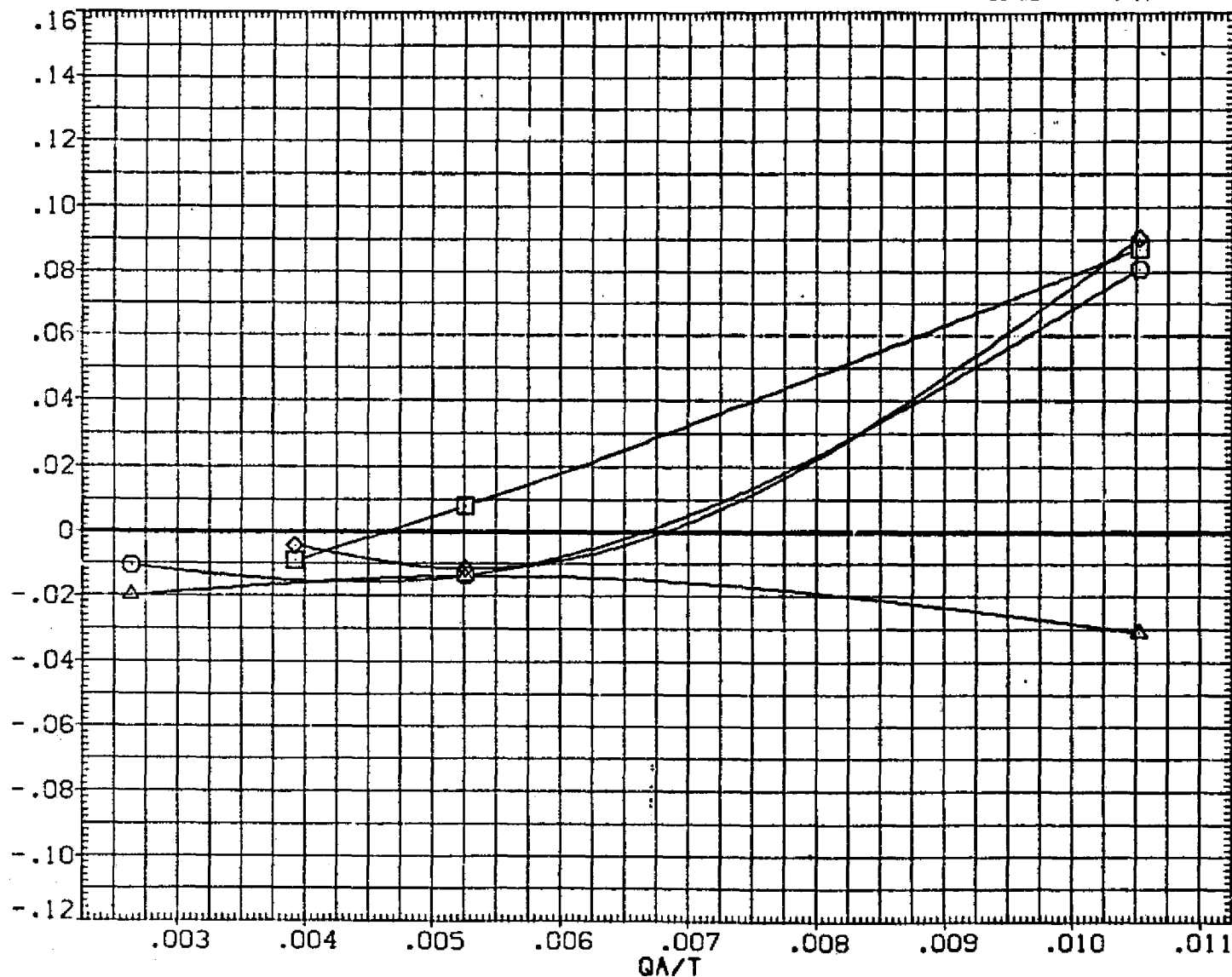


FIGURE 95. AREA RATIO EFFECTS, L/H SIDE FIRING JETS

(J) ALPHA = 10.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA079)	01N33 LARC CFHT 118 (MA-22)
(SJA080)	01N37 LARC CFHT 118 (MA-22)
(SJA081)	01N61 LARC CFHT 118 (MA-22)
(SJA005)	01N85 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BD FLAP	BETA	REFERENCE INFORMATION		
.000	2.000	.000	.000	SREF	2690.0000	50. FT.
.000	2.000	.000	.000	LREF	474.8000	INCHES
.000	2.000	.000	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - AXIAL FORCE, N(AF)

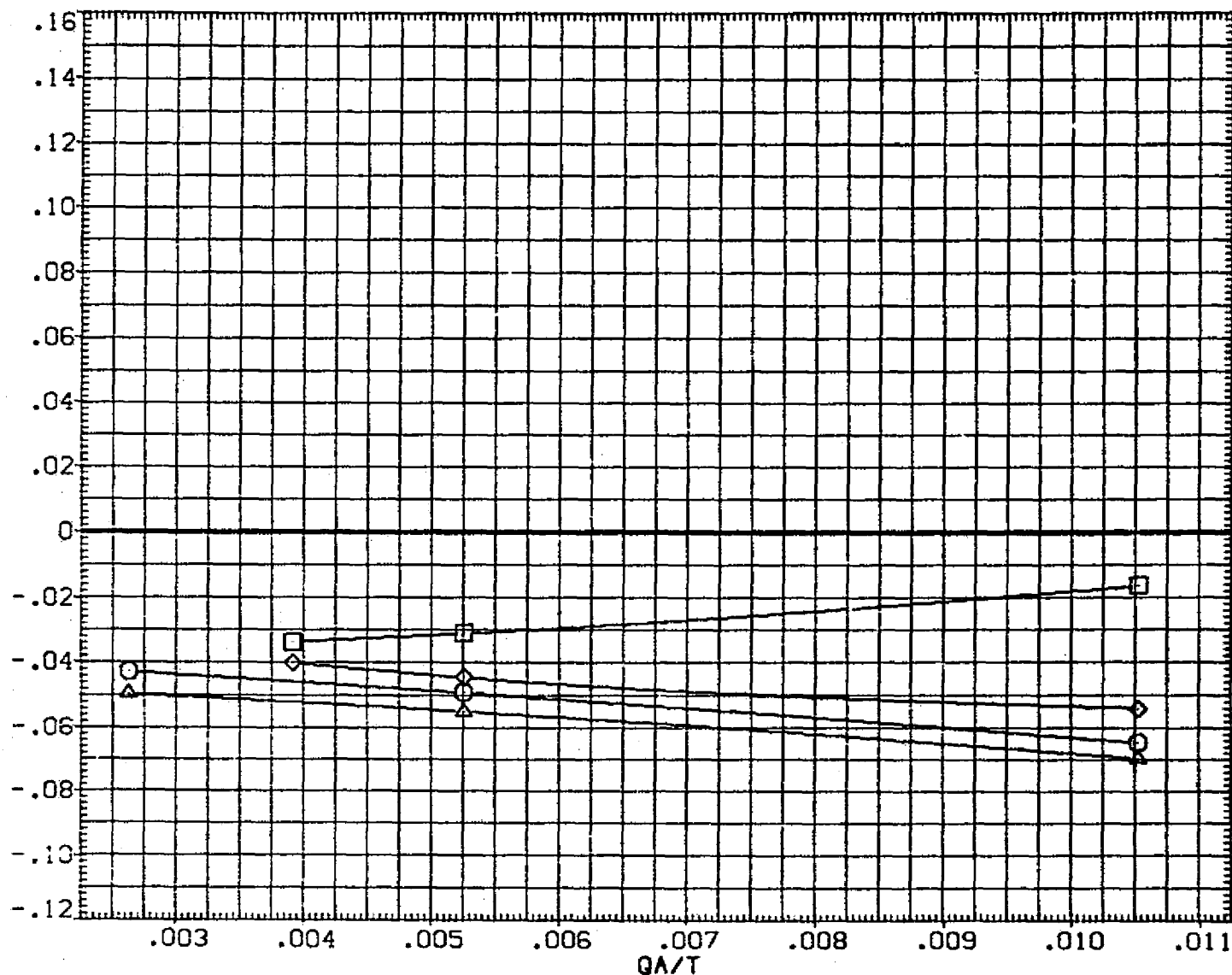


FIGURE 95. AREA RATIO EFFECTS, L/H SIDE FIRING JETS

(K) ALPHA = 15.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA079)	01N33 LARC CFHT 118 (MA-22)
(SJA080)	01N37 LARC CFHT 118 (MA-22)
(SJA081)	01N61 LARC CFHT 118 (MA-22)
(SJA005)	01N85 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BOFLAP	BETA	REFERENCE INFORMATION	
.000	2.000	.000	.000	SREF	2690.0000 SQ. FT.
.000	2.000	.000	.000	LREF	474.8000 INCHES
.000	2.000	.000	.000	BREF	936.6800 INCHES
.000	2.000	.000	.000	XMRP	1076.7000 IN. X0
				YMRP	.0000 IN. Y0
				ZMRP	375.0000 IN. Z0
				SCALE	.0100

RCS JET AMPLIFICATION FACTOR - AXIAL FORCE, N(AF)

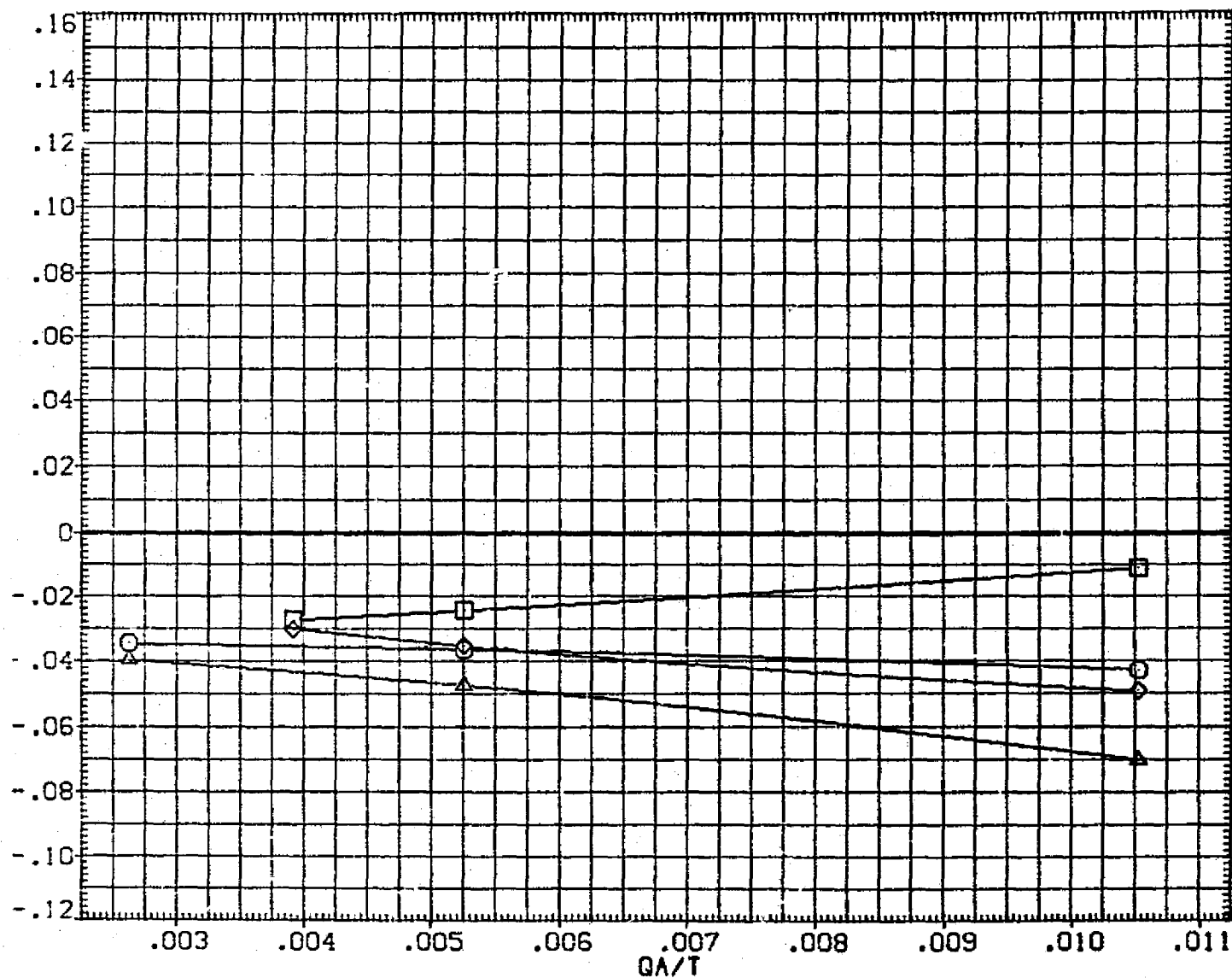


FIGURE 95. AREA RATIO EFFECTS, L/H SIDE FIRING JETS
 (C) ALPHA = 20.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA079)	QIN33 LARC CFHT 118 (MA-22)
(SJA080)	QIN37 LARC CFHT 118 (MA-22)
(SJA081)	QIN61 LARC CFHT 118 (MA-22)
(SJA005)	QIN85 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BOFLAP	BETA	REFERENCE INFORMATION		
.000	2.000	.000	.000	SREF	2690.0000	SQ. FT.
.000	2.000	.000	.000	LREF	474.8000	INCHES
.000	2.000	.000	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - AXIAL FORCE, N(AF)

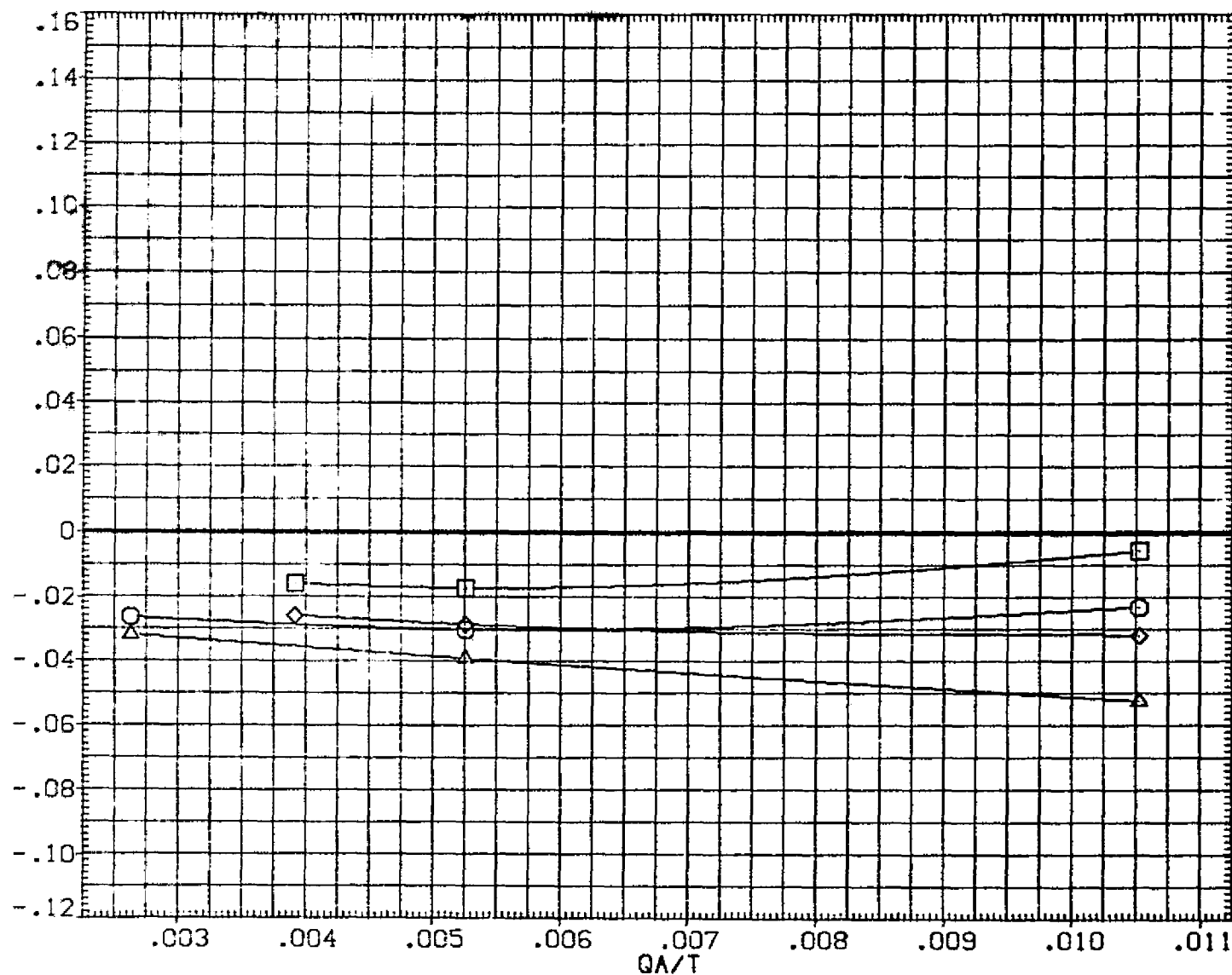


FIGURE 95. AREA RATIO EFFECTS, L/H SIDE FIRING JETS
(M) ALPHA = 25.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA079)	01N33 LARC CFHT 118 (MA-22)
(SJA080)	01N37 LARC CFHT 116 (MA-22)
(SJA081)	01N61 LARC CFHT 118 (MA-22)
(SJA005)	01N85 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BD FLAP	BETA	REFERENCE INFORMATION		
.000	2.000	.000	.000	SREF	2690.0000	50. FT.
.000	2.000	.000	.000	LREF	474.8000	INCHES
.000	2.000	.000	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - AXIAL FORCE, NCAF

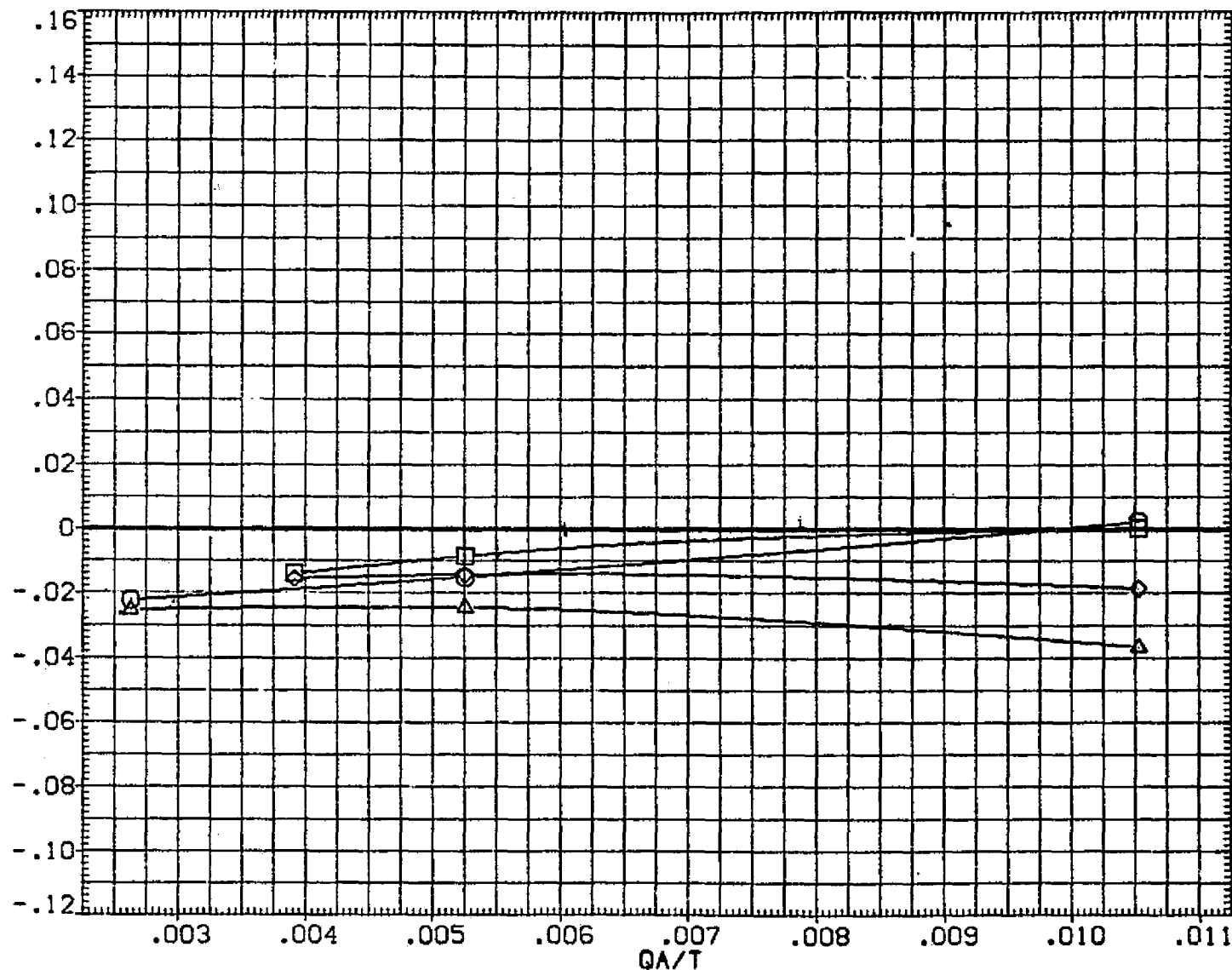


FIGURE 95. AREA RATIO EFFECTS, L/H SIDE FIRING JETS

(N)ALPHA = 30.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA079)	01N33 LARC CFHT 118 (MA-22)
(SJA080)	01N37 LARC CFHT 118 (MA-22)
(SJA081)	01N61 LARC CFHT 118 (MA-22)
(SJAC05)	01N85 LARC CFHT 118 (MA-22)

ELEVON	NO.JET	BDFLAP	BETA	REFERENCE INFORMATION
.000	2.000	.000	.000	SREF 2690.0000 SQ.FT.
.000	2.000	.000	.000	LREF 474.8000 INCHES
.000	2.000	.000	.000	BREF 936.6800 INCHES
.000	2.000	.000	.000	XMRP 1076.7000 IN. X0
				YMRP .0000 IN. Y0
				ZMRP 375.0000 IN. Z0
				SCALE .0100

RCS JET AMPLIFICATION FACTOR - AXIAL FORCE, N(AF)

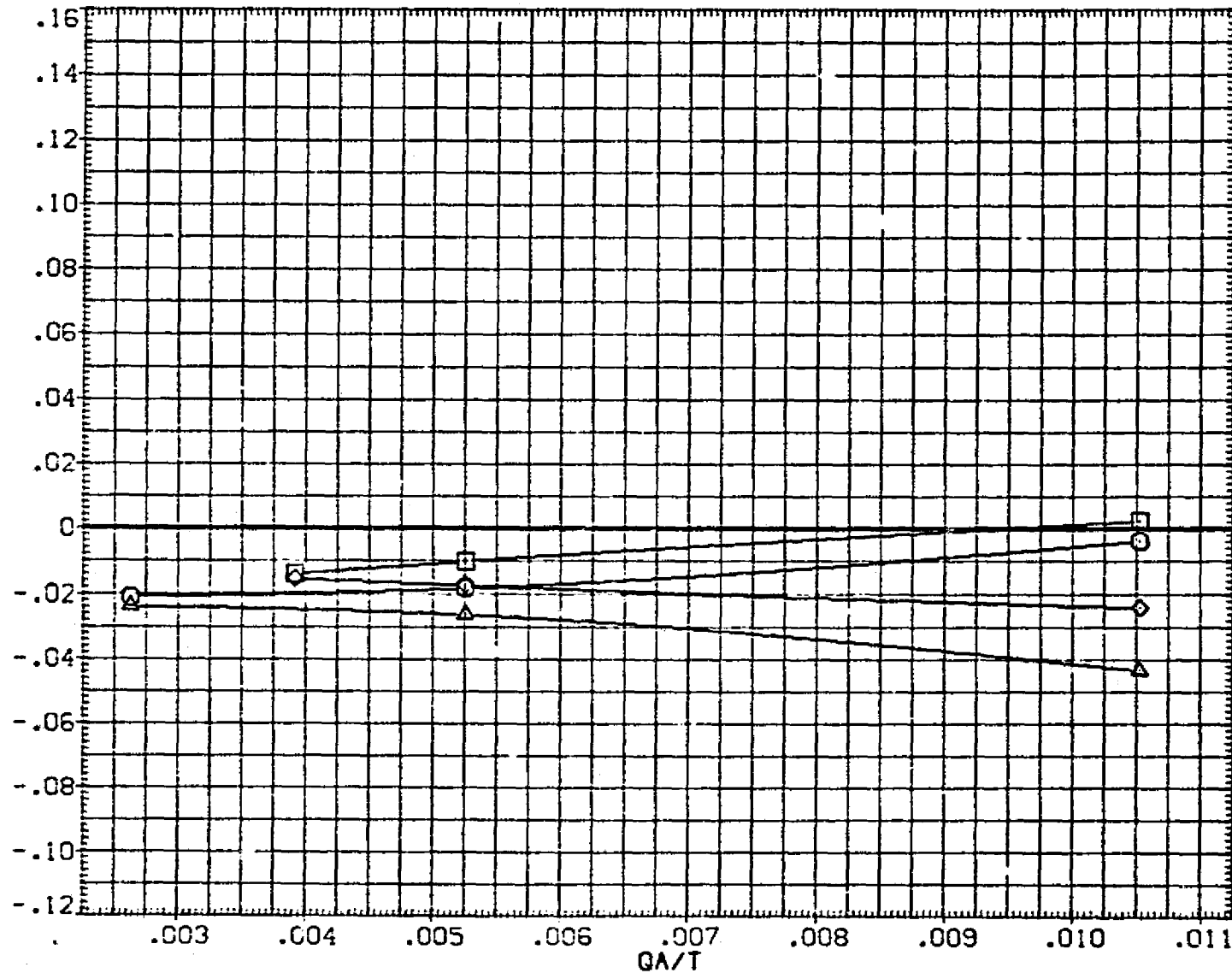


FIGURE 95. AREA RATIO EFFECTS, L/H SIDE FIRING JETS

(C) ALPHA = 35.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA079)	QIN33 LARC CFHT 118 (MA-22)
(SJA080)	QIN37 LARC CFHT 118 (MA-22)
(SJA081)	QIN61 LARC CFHT 118 (MA-22)
(SJA005)	QIN85 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BOFLAP	BETA	REFERENCE INFORMATION
.000	2.000	.000	.000	SREF 2690.0000 SQ. FT.
.000	2.000	.000	.000	LREF 474.8000 INCHES
.000	2.000	.000	.000	BREF 936.6800 INCHES
.000	2.000	.000	.000	XMRP 1076.7000 IN. X0
.000	2.000	.000	.000	YMRP .0000 IN. Y0
.000	2.000	.000	.000	ZMRP 375.0000 IN. Z0
				SCALE .0100

RCS JET AMPLIFICATION FACTOR - ROLL, NCRM

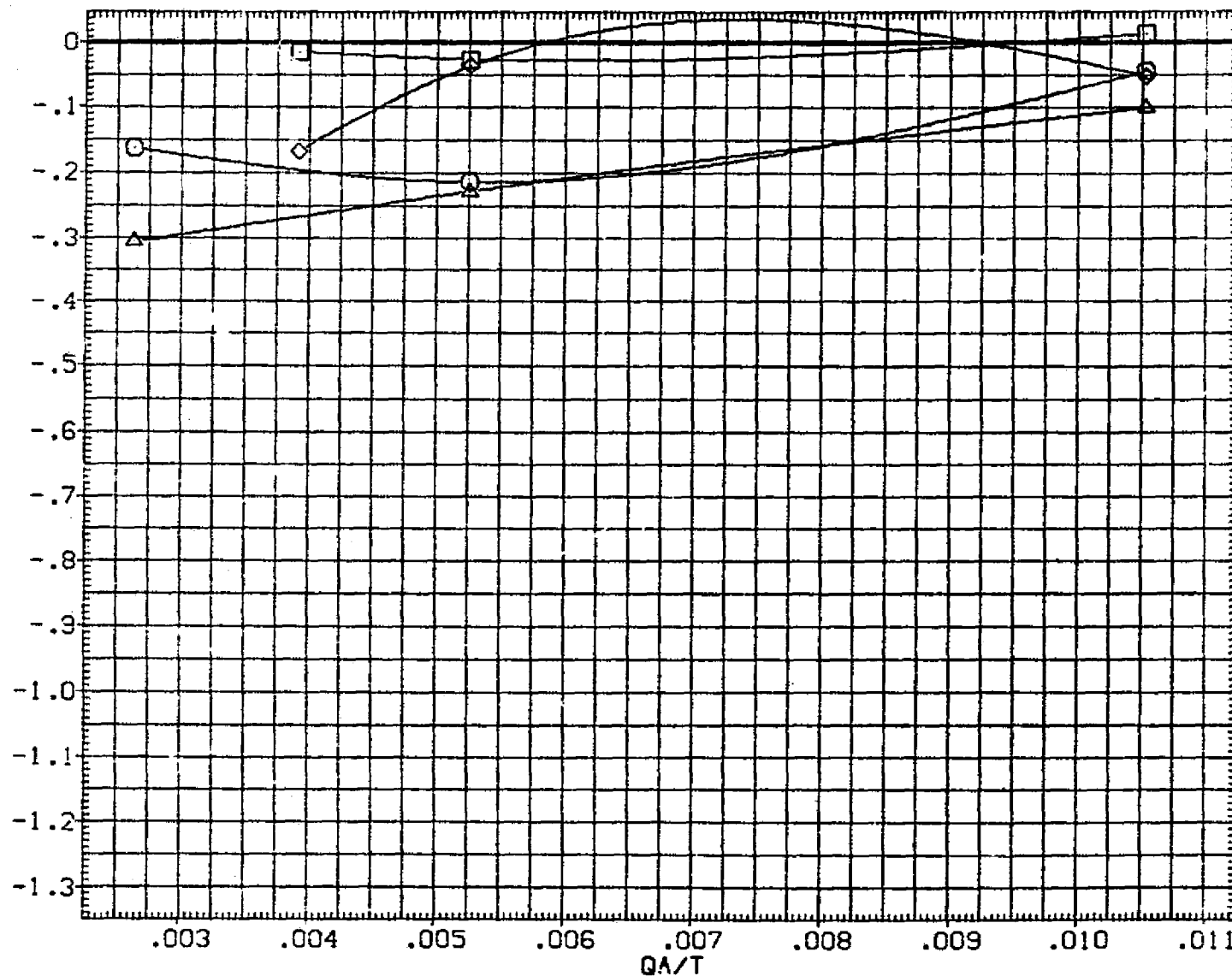


FIGURE 95. AREA RATIO EFFECTS, L/H SIDE FIRING JETS
(A) ALPHA = -8.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA079)	01N33 LARC CFHT 118 (MA-22)
(SJA080)	01N37 LARC CFHT 118 (MA-22)
(SJA081)	01N61 LARC CFHT 118 (MA-22)
(SJA005)	01N85 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	SDFLAP	BETA	REFERENCE INFORMATION
.000	2.000	.000	.000	SREF 2690.0000 SQ. FT.
.000	2.000	.000	.000	LREF 474.8000 INCHES
.000	2.000	.000	.000	BREF 936.5800 INCHES
.000	2.000	.000	.000	XMRP 1076.7000 IN. X0
				YMRP .0000 IN. Y0
				ZMRP 375.0000 IN. Z0
				SCALE .0100

RCS JET AMPLIFICATION FACTOR - ROLL, N(RM)

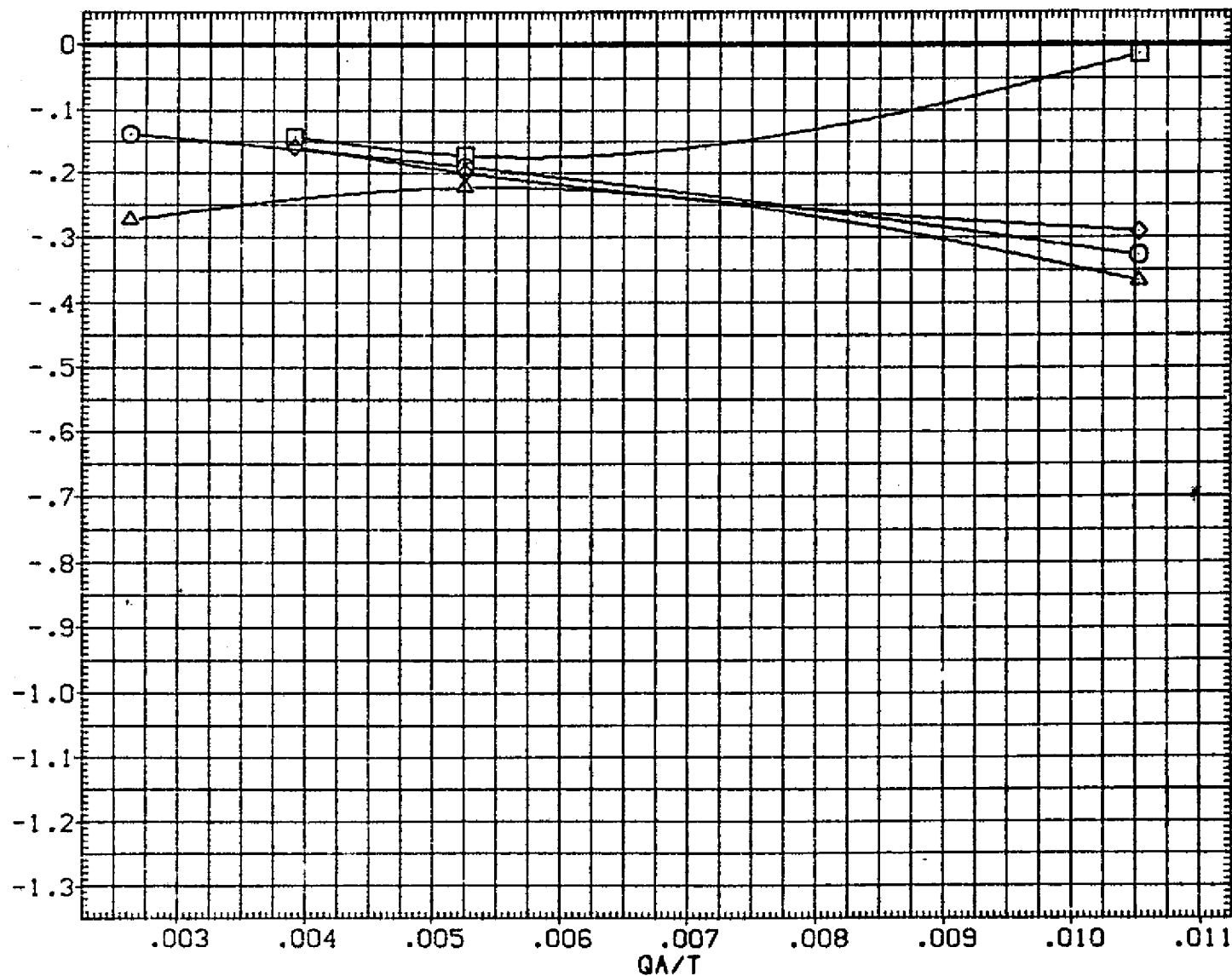


FIGURE 95. AREA RATIO EFFECTS, L/H SIDE FIRING JETS

(B) ALPHA = -6.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA079)	01N33 LARC CFHT 118 (MA-22)
(SJA080)	01N37 LARC CFHT 118 (MA-22)
(SJA081)	01N61 LARC CFHT 118 (MA-22)
(SJA005)	01N85 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BOFLAP	BETA	REFERENCE INFORMATION
.000	2.000	.000	.000	SREF 2690.0000 SQ. FT.
.000	2.000	.000	.000	LREF 474.8000 INCHES
.000	2.000	.000	.000	BREF 936.6800 INCHES
.000	2.000	.000	.000	XMRP 1076.7000 IN. X0
				YMRP .0000 IN. Y0
				ZMRP 375.0000 IN. Z0
				SCALE .0100

RCS JET AMPLIFICATION FACTOR - ROLL, NCRM)

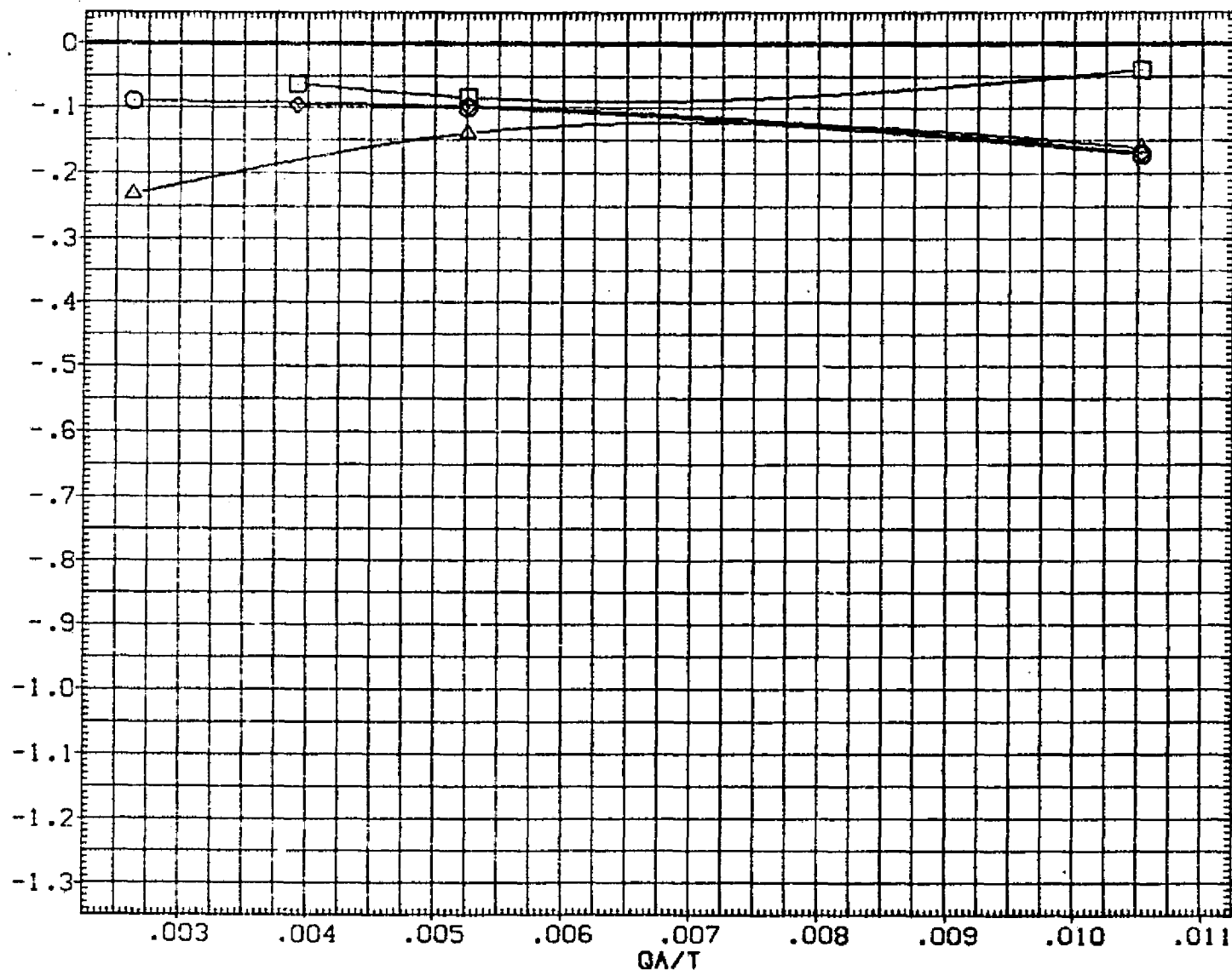


FIGURE 95. AREA RATIO EFFECTS, L/H SIDE FIRING JETS

(C) ALPHA = -4.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA079)	01N33 LARC CFHT 118 (MA-22)
(SJA080)	01N37 LARC CFHT 118 (MA-22)
(SJA081)	01N61 LARC CFHT 118 (MA-22)
(SJA005)	01N85 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BD FLAP	BETA	REFERENCE INFORMATION		
.000	2.000	.000	.000	SREF	2690.0000	50. FT.
.000	2.000	.000	.000	LREF	474.8000	INCHES
.000	2.000	.000	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - ROLL, N(RM)

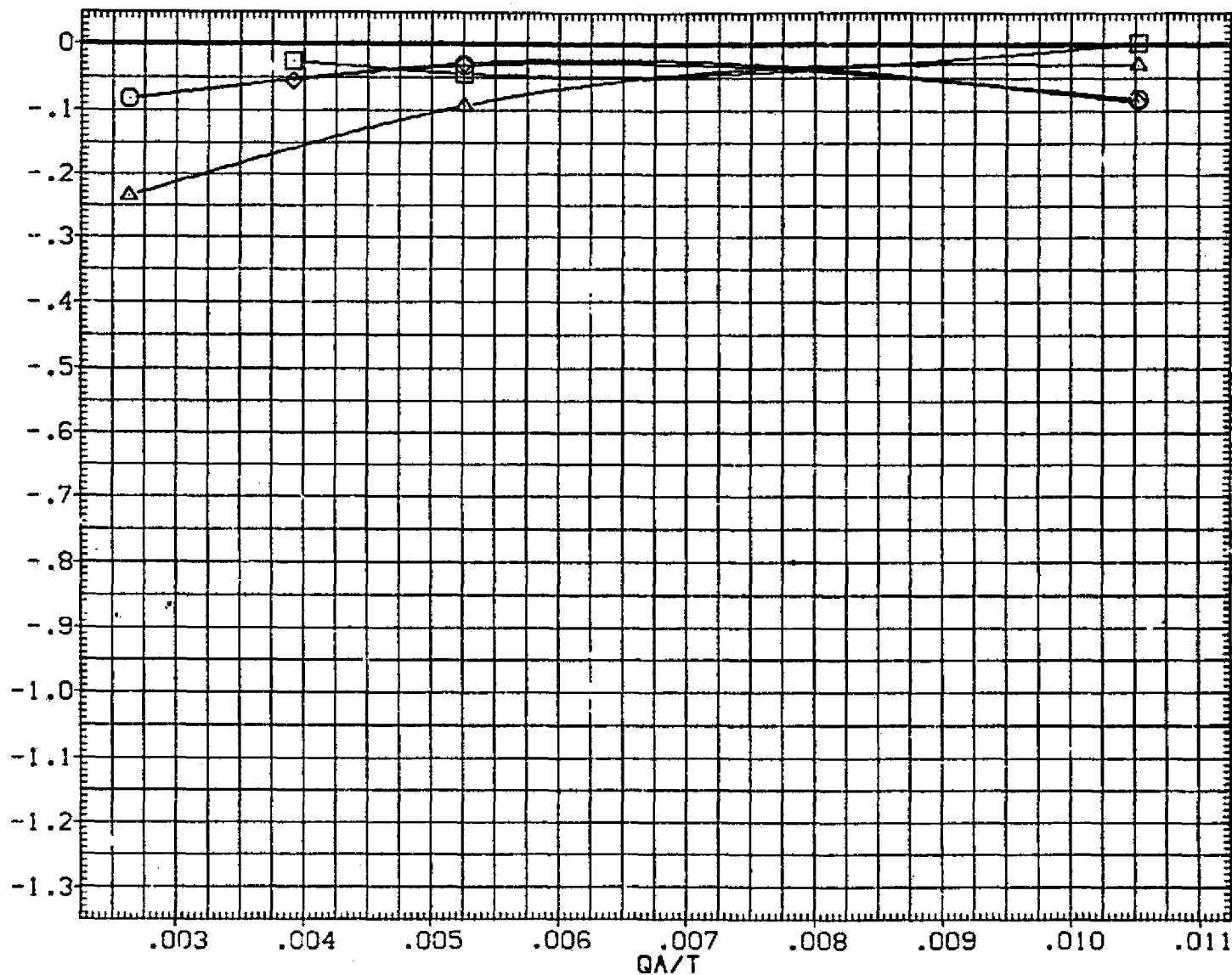


FIGURE 95. AREA RATIO EFFECTS, L/H SIDE FIRING JETS

(D) ALPHA = -2.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA079) □	01N33 LARC CFHT 118 (MA-22)
(SJA080) □	01N37 LARC CFHT 118 (MA-22)
(SJA081) X	01N51 LARC CFHT 118 (MA-22)
(SJA005) △	01N85 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BOFLAP	BETA	REFERENCE INFORMATION		
.000	2.000	.000	.000	SREF	2690.0000	50. FT.
.000	2.000	.000	.000	LREF	474.8000	INCHES
.000	2.000	.000	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - ROLL, N(RM)

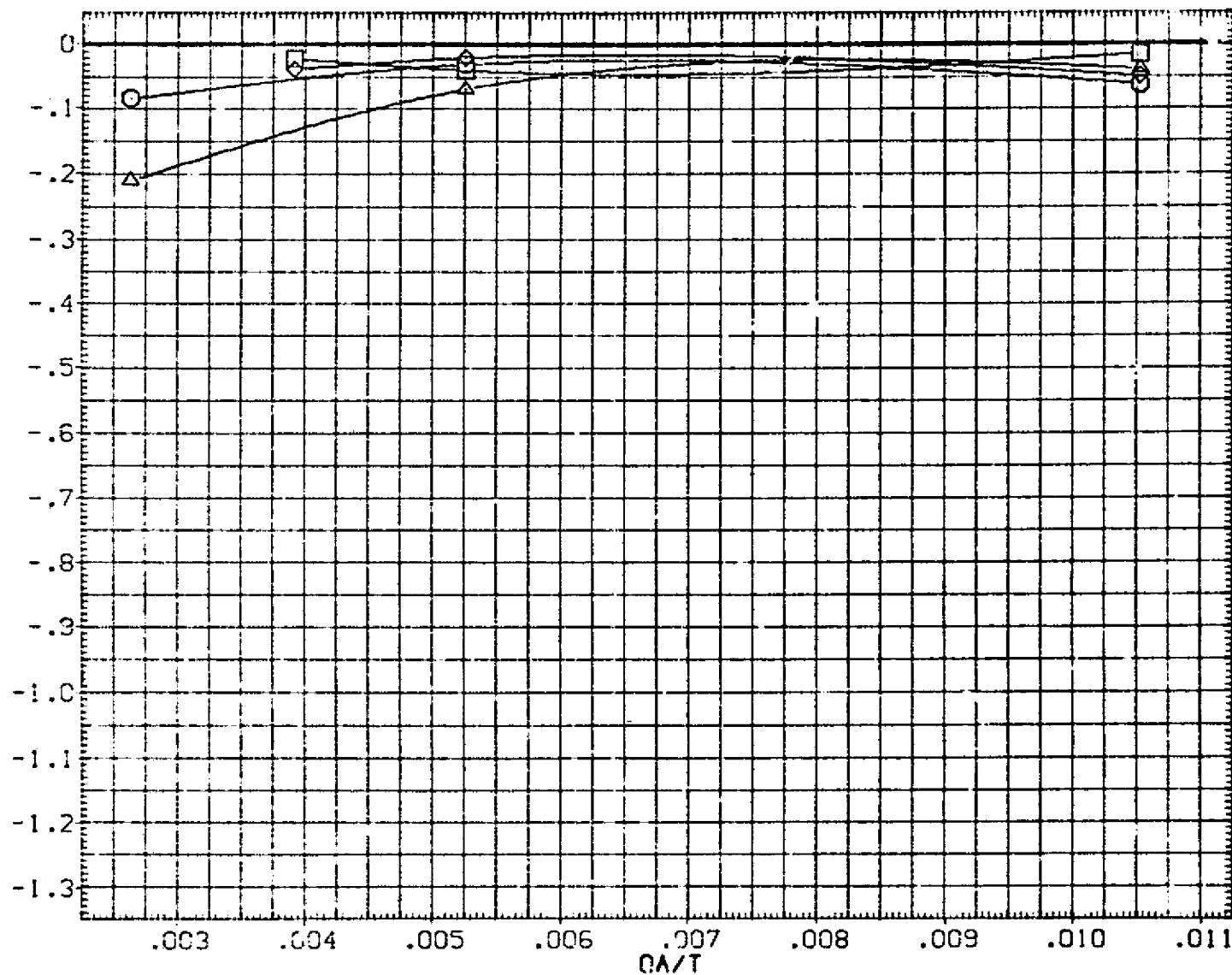


FIGURE 95. AREA RATIO EFFECTS, L/H SIDE FIRING JETS

(E) ALPHA = .00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA079)	01N33 LARC CFHT 118 (MA-22)
(SJA080)	01N37 LARC CFHT 118 (MA-22)
(SJA081)	01N61 LARC CFHT 118 (MA-22)
(SJA005)	01N85 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BOFLAP	BETA	REFERENCE INFORMATION
.000	2.000	.000	.000	SREF 2690.0000 SQ. FT.
.000	2.000	.000	.000	LREF 474.8000 INCHES
.000	2.000	.000	.000	BREF 936.6800 INCHES
.000	2.000	.000	.000	XMRP 1076.7000 IN. XO
				YMRP .0000 IN. YO
				ZMRP 375.0000 IN. ZO
				SCALE .0100

RCS JET AMPLIFICATION FACTOR - ROLL, NCRM

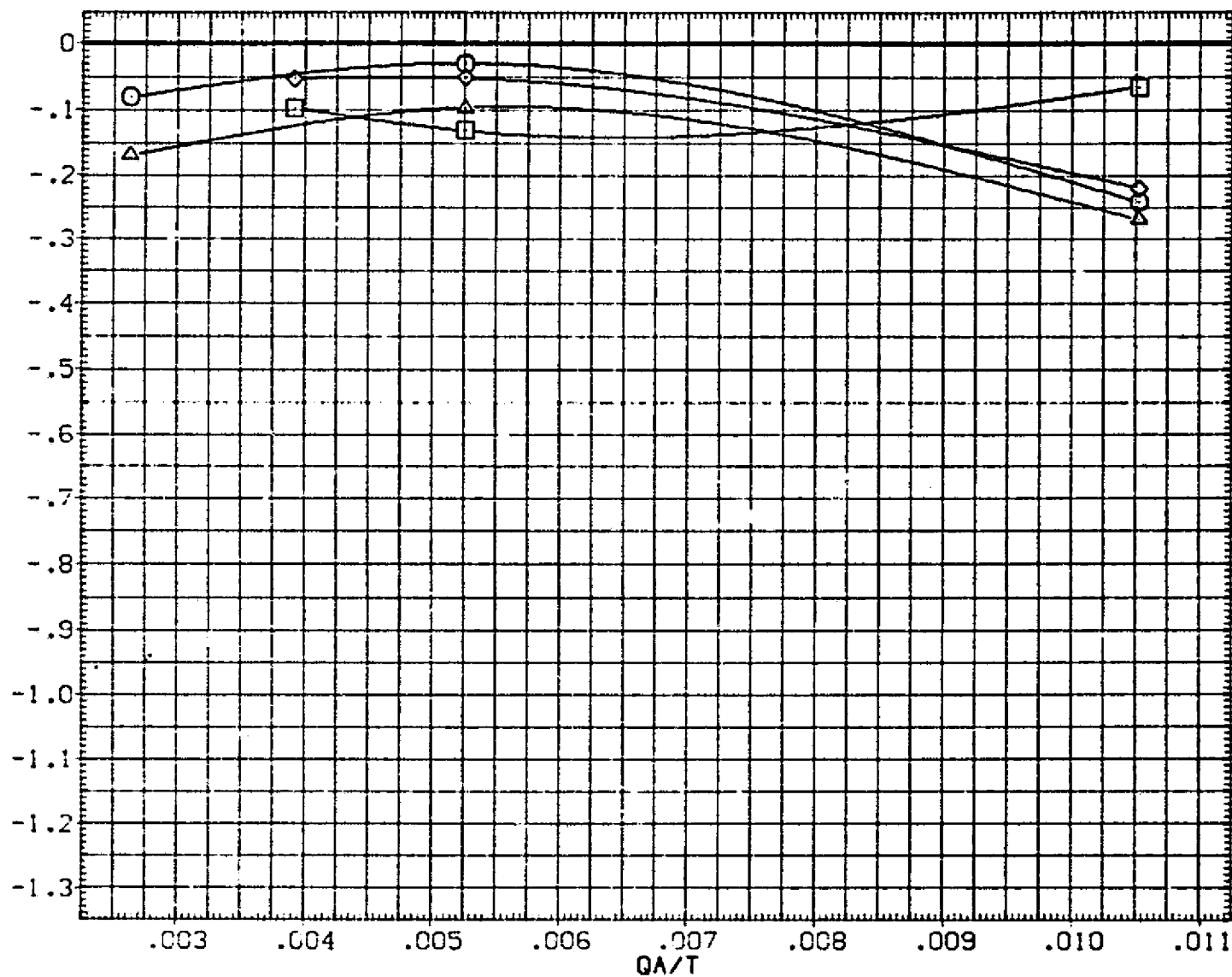


FIGURE 95. AREA RATIO EFFECTS, L/H SIDE FIRING JETS
(F)ALPHA = 2.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA079)	OIN33 LARC CFHT 118 (MA-22)
(SJA080)	OIN37 LARC CFHT 118 (MA-22)
(SJA081)	OIN61 LARC CFHT 118 (MA-22)
(SJA005)	OIN85 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BOFLAP	BETA	REFERENCE INFORMATION		
.000	2.000	.000	.000	SREF	2690.0000	SQ. FT.
.000	2.000	.000	.000	LREF	474.8000	INCHES
.000	2.000	.000	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - ROLL, N(RM)

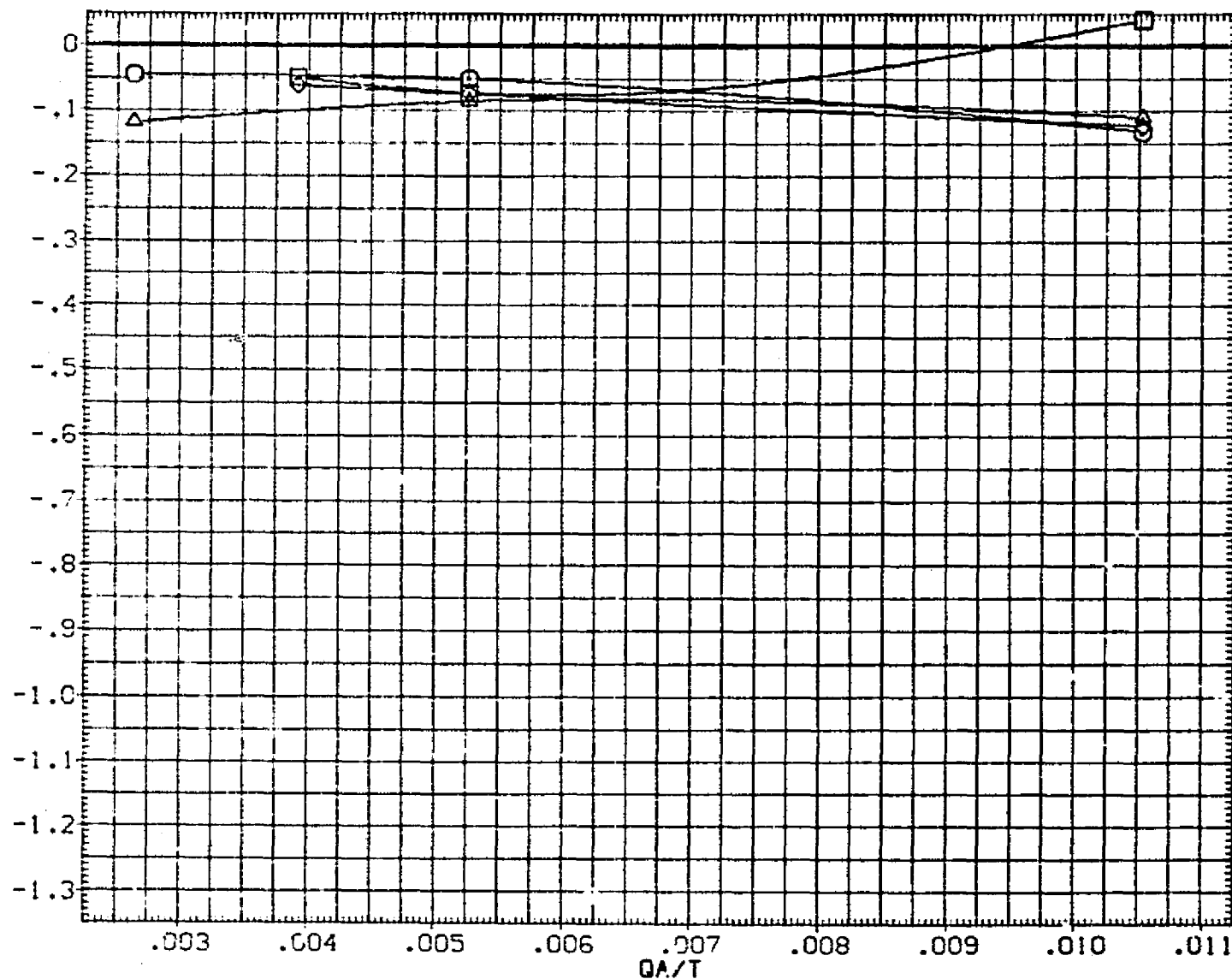


FIGURE 95. AREA RATIO EFFECTS, L/H SIDE FIRING JETS

(G) ALPHA = 4.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA079) ○	01N33 LARC CFMT 118 (MA-22)
(SJA080) □	01N37 LARC CFMT 118 (MA-22)
(SJA091) ◇	01N61 LARC CFMT 118 (MA-22)
(SJA005) △	01N85 LARC CFMT 118 (MA-22)

ELEVON	NO. JET	BDFLAP	BETA	REFERENCE INFORMATION
.000	2.000	.000	.000	SREF 2690.0000 SQ. FT.
.000	2.000	.000	.000	LREF 474.8000 INCHES
.000	2.000	.000	.000	BREF 936.6800 INCHES
.000	2.000	.000	.000	XMRP 1076.7000 IN. X0
				YMRP .0000 IN. Y0
				ZMRP 375.0000 IN. Z0
				SCALE .0100

RCS JET AMPLIFICATION FACTOR - ROLL, N(RM)

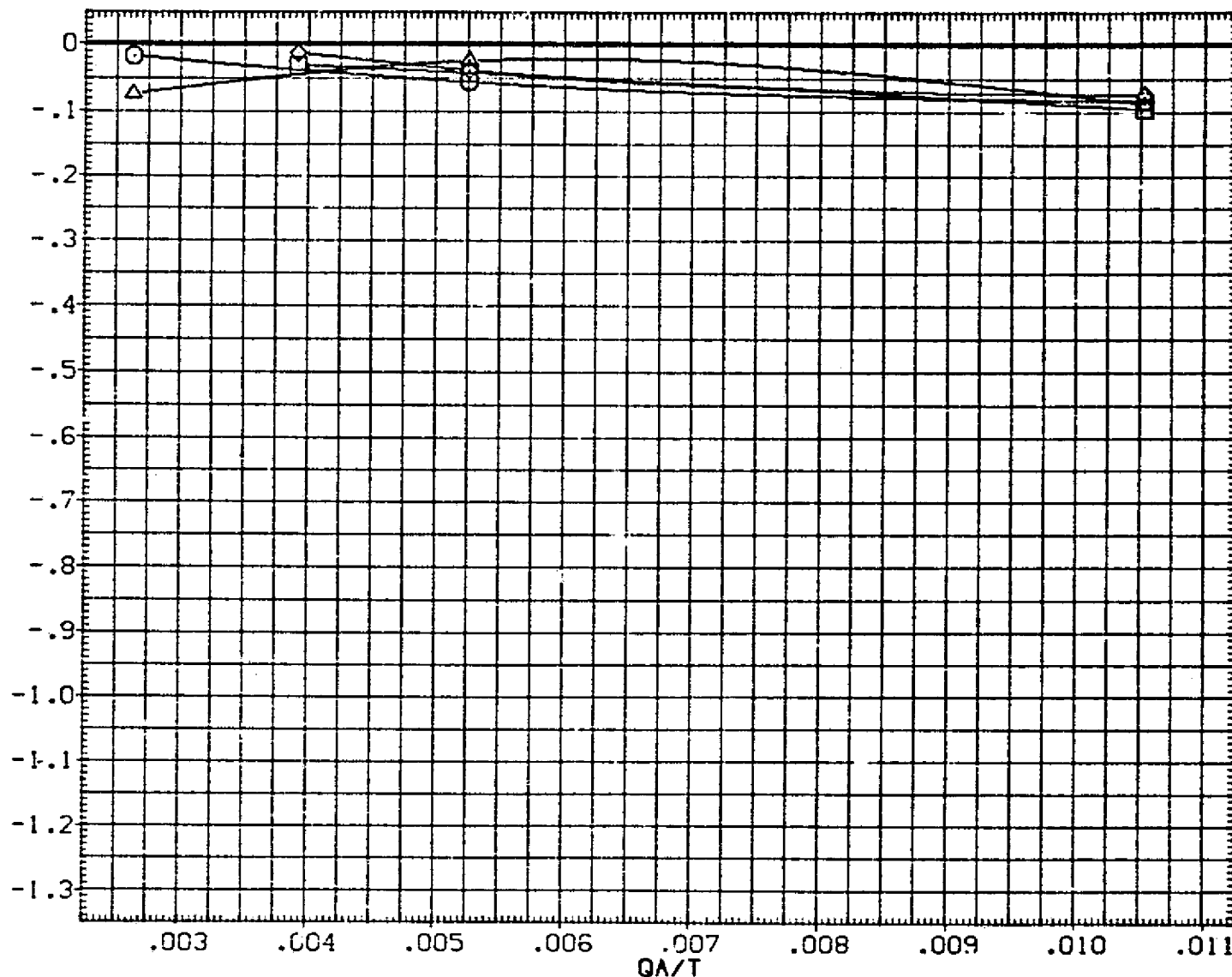


FIGURE 95. AREA RATIO EFFECTS, L/H SIDE FIRING JETS

(H)ALPHA = 6.00

DATA SFT SYMBOL	CONFIGURATION DESCRIPTION
(SJA079)	01N33 LARC CFHT 118 (MA-22)
(SJA080)	01N37 LARC CFHT 118 (MA-22)
(SJA081)	01N61 LARC CFHT 118 (MA-22)
(SJA005)	01N85 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	POFLAP	BETA	REFERENCE INFORMATION
.000	2.000	.000	.000	SREF 2690.0000 SQ. FT.
.000	2.000	.000	.000	LREF 474.8000 INCHES
.000	2.000	.000	.000	BREF 936.6800 INCHES
.000	2.000	.000	.000	XMRP 1076.7000 IN. X0
.000	2.000	.000	.000	YMRP .0000 IN. Y0
.000	2.000	.000	.000	ZMRP 375.0000 IN. Z0
.000	2.000	.000	.000	SCALE .0100

RCS JET AMPLIFICATION FACTOR - ROLL, NCRM

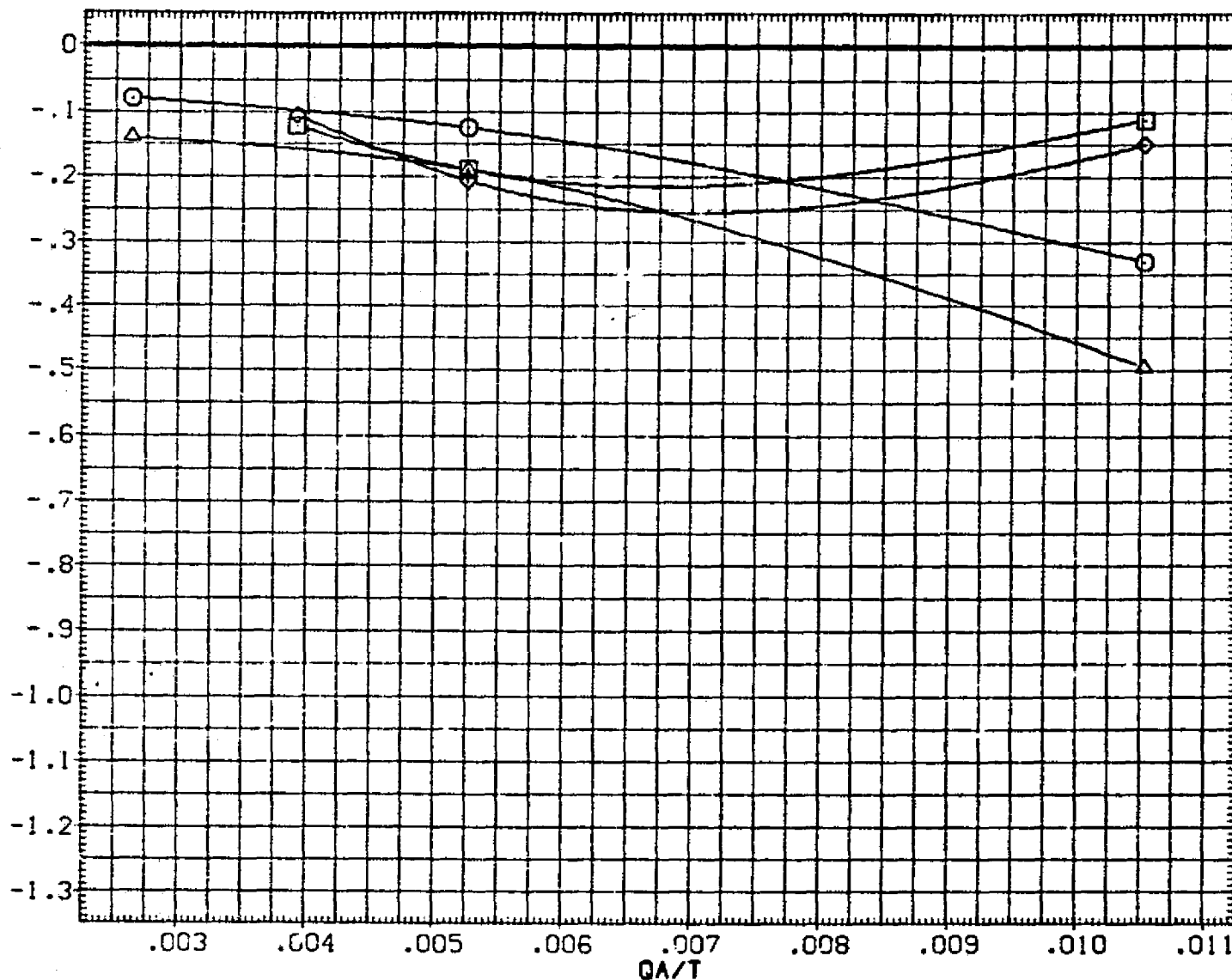


FIGURE 95. AREA RATIO EFFECTS, L/H SIDE FIRING JETS
(I) ALPHA = 8.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA079)	01N33 LARC CFHT 118 (MA-22)
(SJA080)	01N37 LARC CFHT 118 (MA-22)
(SJA081)	01N61 LARC CFHT 118 (MA-22)
(SJA005)	01N85 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BOFLAP	BETA	REFERENCE INFORMATION		
.000	2.000	.000	.000	SREF	2690.0000	50. F"
.000	2.000	.000	.000	LREF	474.8000	INCHES
.000	2.000	.000	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XMPP	1076.7000	IN. X0
				YMPP	.0000	IN. Y0
				ZMPP	375.0000	IN. Z0
				SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - ROLL, N(RN)

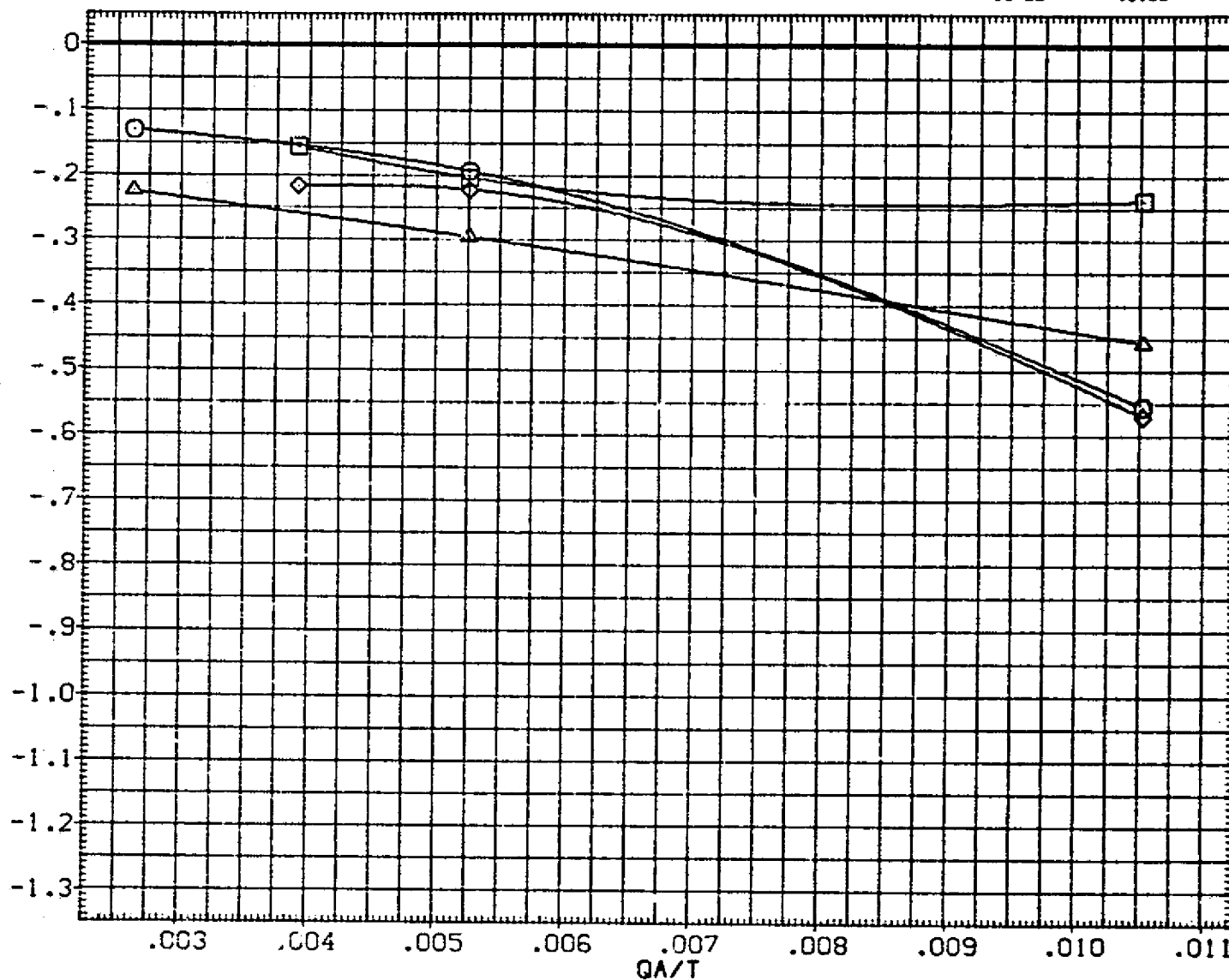


FIGURE 95. AREA RATIO EFFECTS, L/H SIDE FIRING JETS

(J)ALPHA = 10.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA079)	01N33 LARC CFHT 118 (MA-22)
(SJA080)	01N37 LARC CFHT 118 (MA-22)
(SJA081)	01N61 LARC CFHT 118 (MA-22)
(SJA085)	01N85 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BOFLAP	BETA	REFERENCE INFORMATION
.000	2.000	.000	.000	SREF 2690.0000 SQ. FT.
.000	2.000	.000	.000	LREF 474.8000 INCHES
.000	2.000	.000	.000	BREF 936.6800 INCHES
.000	2.000	.000	.000	XMRP 1076.7000 IN. X0
				YMRP .0000 IN. Y0
				ZMRP 375.0000 IN. Z0
				SCALE .0100

RCS JET AMPLIFICATION FACTOR - ROLL, NCRM)

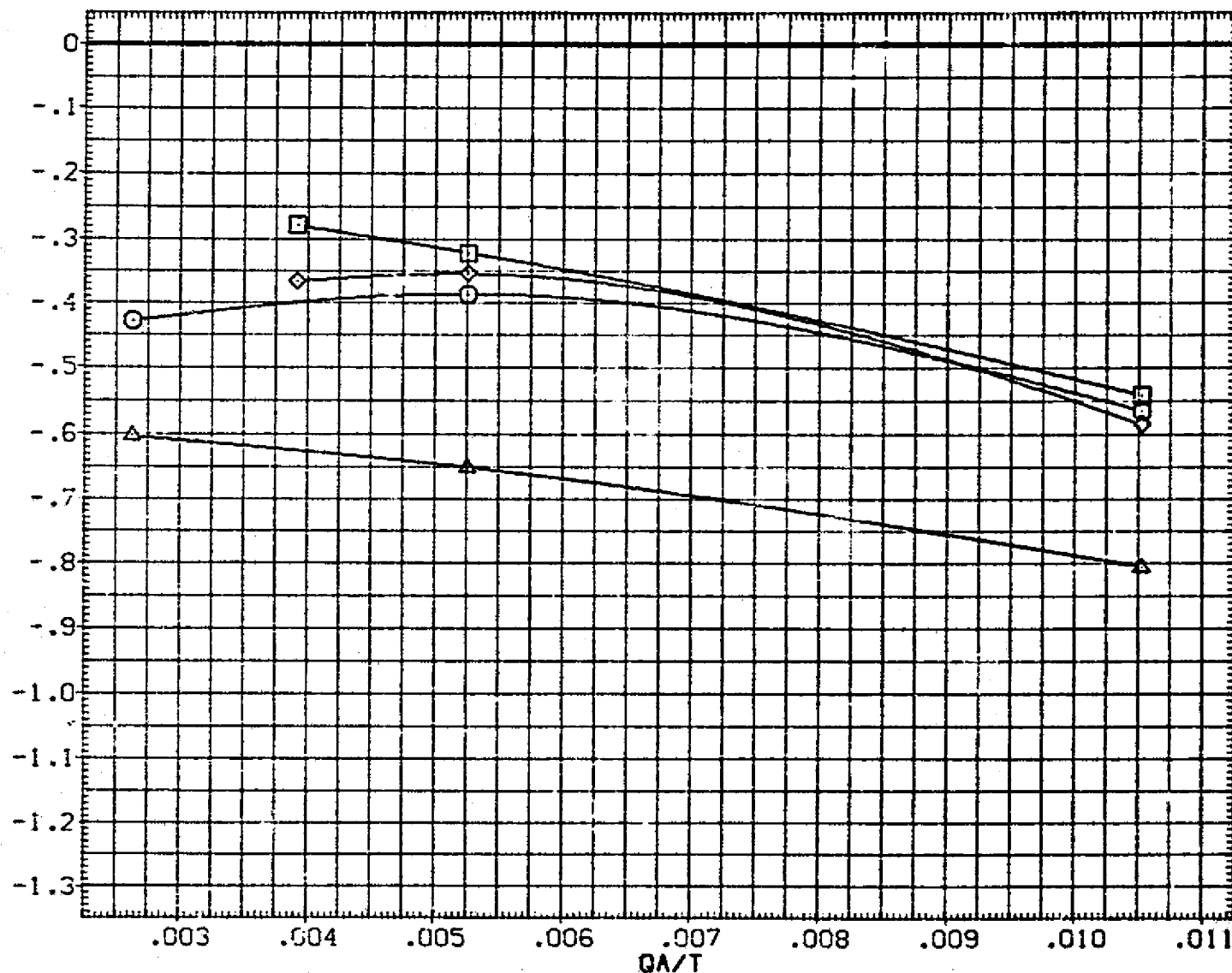


FIGURE 95. AREA RATIO EFFECTS, L/H SIDE FIRING JETS

(K) ALPHA = 15.00

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(SJA079)	□	01N33 LARC CFHT 118 (MA-22)
(SJA080)	□	01N37 LARC CFHT 118 (MA-22)
(SJA081)	◇	01N61 LARC CFHT 118 (MA-22)
(SJA005)	△	01N85 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BOFLAP	BETA	REFERENCE INFORMATION		
.000	2.000	.000	.000	SREF	2690.0000	50. FT.
.000	2.000	.000	.000	LREF	474.8000	INCHES
.000	2.000	.000	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - ROLL, N(RM)

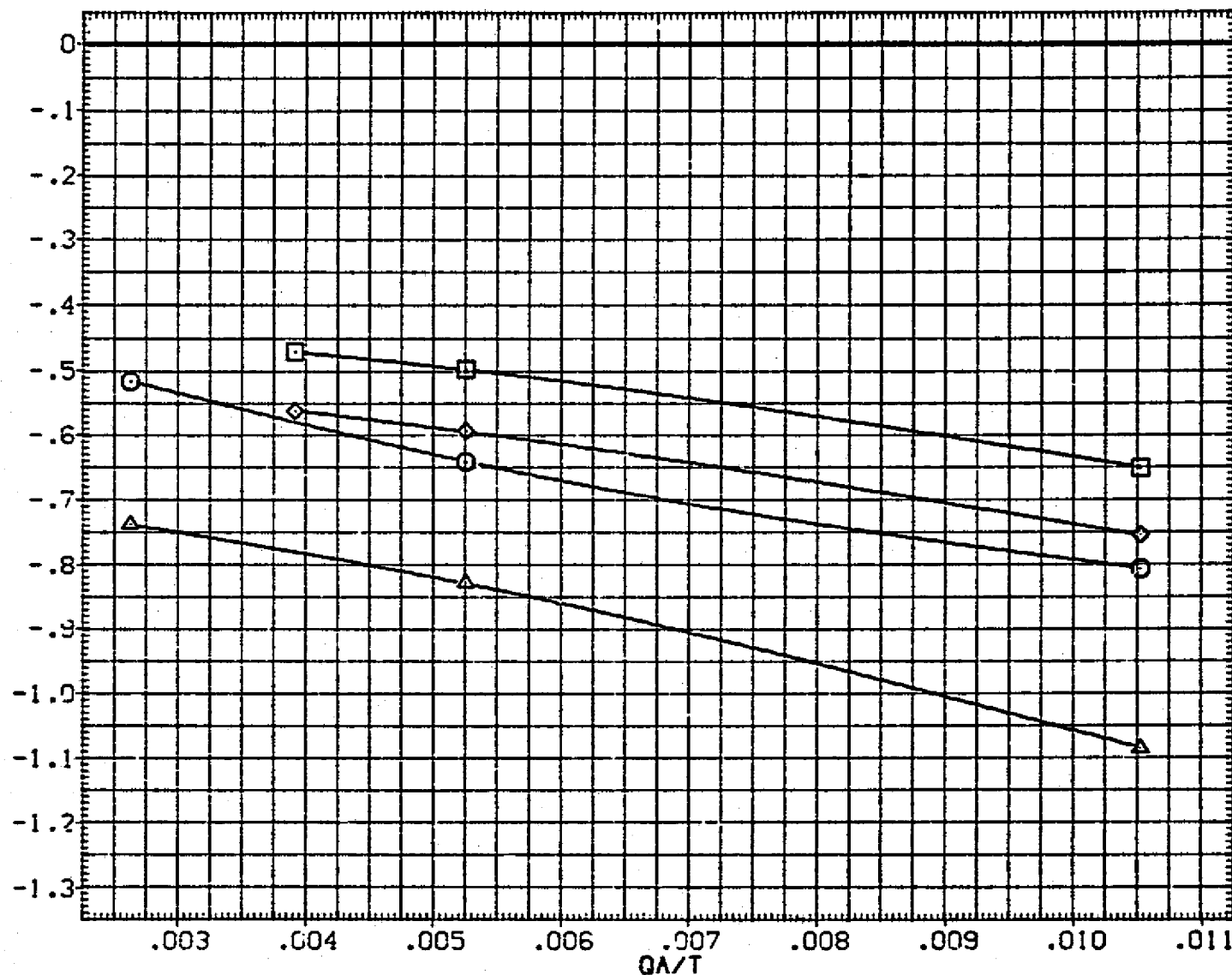


FIGURE 95. AREA RATIO EFFECTS, L/H SIDE FIRING JETS

(L) ALPHA = 20.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA079)	Q1N33 LARC CFHT 118 (MA-22)
(SJA080)	Q1N37 LARC CFHT 118 (MA-22)
(SJA081)	Q1N61 LARC CFHT 118 (MA-22)
(SJA005)	Q1N85 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BOFLAP	BETA	REFERENCE INFORMATION		
.000	2.000	.000	.000	SREF	2690.0000	50. FT.
.000	2.000	.000	.000	LREF	474.8000	INCHES
.000	2.000	.000	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - ROLL, NCRM

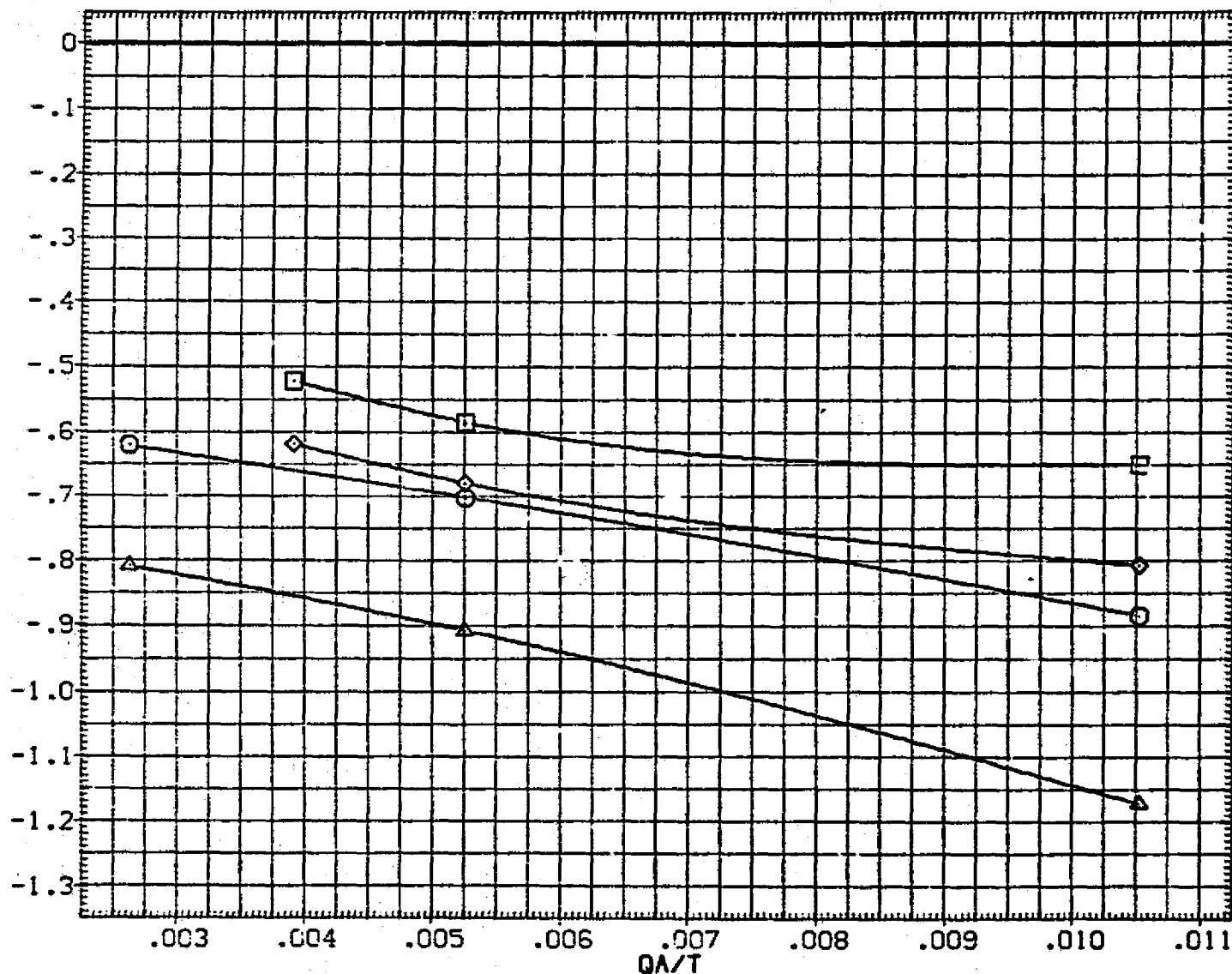


FIGURE 95. AREA RATIO EFFECTS, L/H SIDE FIRING JETS

(M)ALPHA = 25.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA079)	01N33 LARC CFHT 118 (MA-22)
(SJA080)	01N37 LARC CFHT 118 (MA-22)
(SJA081)	01N61 LARC CFHT 118 (MA-22)
(SJA005)	01N85 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BOFLAP	BETA	REFERENCE INFORMATION		
.000	2.000	.000	.000	SREF	2690.0000	50. FT.
.000	2.000	.000	.000	LREF	474.8000	INCHES
.000	2.000	.000	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - ROLL, N(RM)

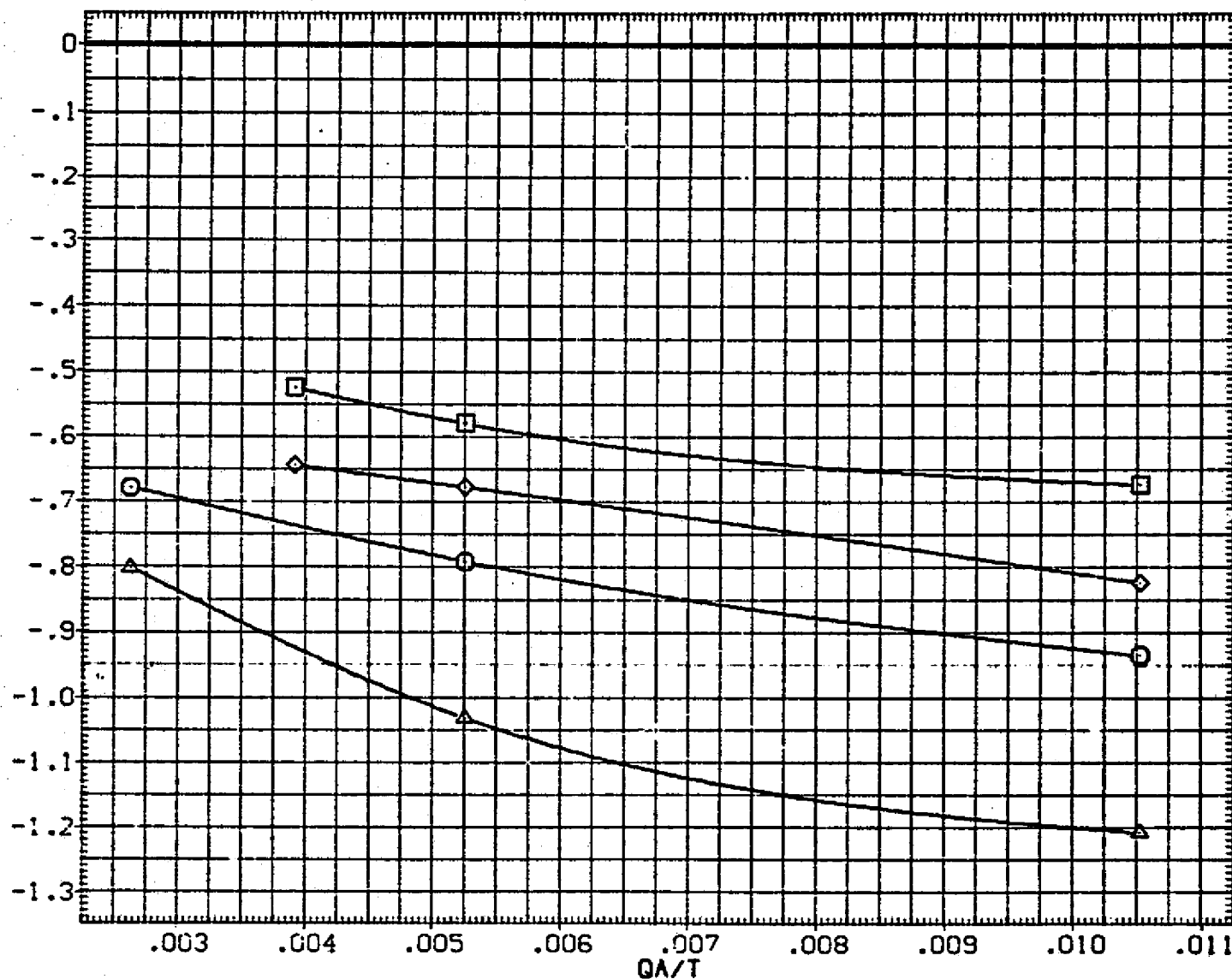


FIGURE 95. AREA RATIO EFFECTS, L/H SIDE FIRING JETS

(N)ALPHA = 30.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA079)	01N33 LARC CFHT 118 (MA-22)
(SJA080)	01N37 LARC CFHT 118 (MA-22)
(SJA081)	01N61 LARC CFHT 118 (MA-22)
(SJA005)	01N85 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	SDFLAP	BETA	REFERENCE INFORMATION
.000	2.000	.000	.000	SREF 2690.0000 SQ. FT.
.000	2.000	.000	.000	LREF 474.8000 INCHES
.000	2.000	.000	.000	BREF 936.6800 INCHES
.000	2.000	.000	.000	AMRP 1076.7000 IN. X0
.000	2.000	.000	.000	YMRP .0000 IN. Y0
.000	2.000	.000	.000	ZMRP 375.0000 IN. Z0
.000	2.000	.000	.000	SCALE .0100

RCS JET AMPLIFICATION FACTOR - ROLL, N(RM)

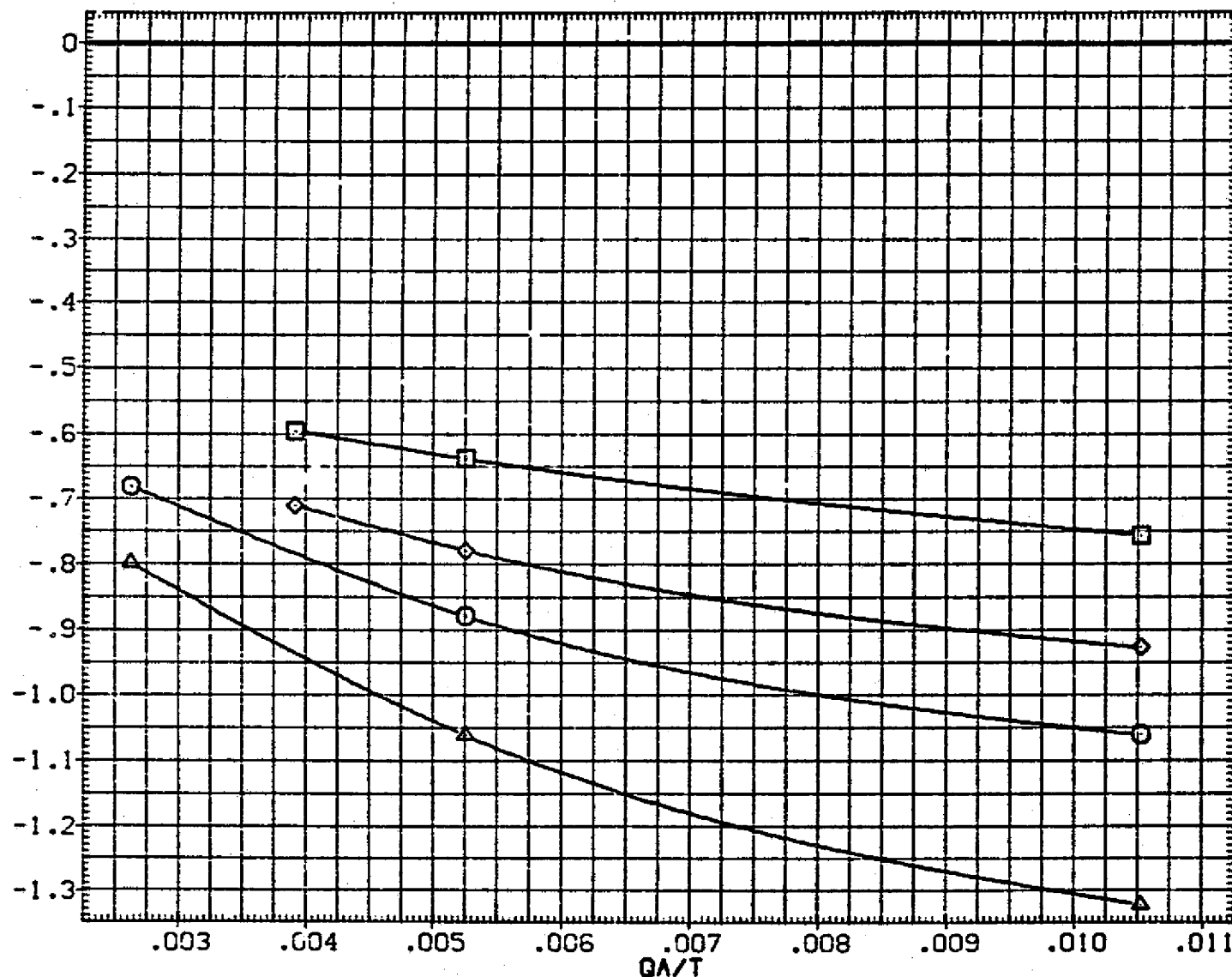


FIGURE 95. AREA RATIO EFFECTS, L/H SIDE FIRING JETS
(O) ALPHA = 35.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA079)	01N33 LARC CFHT 118 (MA-22)
(SJA080)	01N37 LARC CFHT 118 (MA-22)
(SJA081)	01N61 LARC CFHT 118 (MA-22)
(SJA005)	01N85 LARC CFHT 118 (MA-22)

CLEVON	NO. JET	SDFLAP	BETA	REFERENCE INFORMATION		
.000	2.000	.000	.000	SREF	2690.0000	50. FT.
.000	2.000	.000	.000	LREF	474.8000	INCHES
.000	2.000	.000	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - YAW, N(YM)

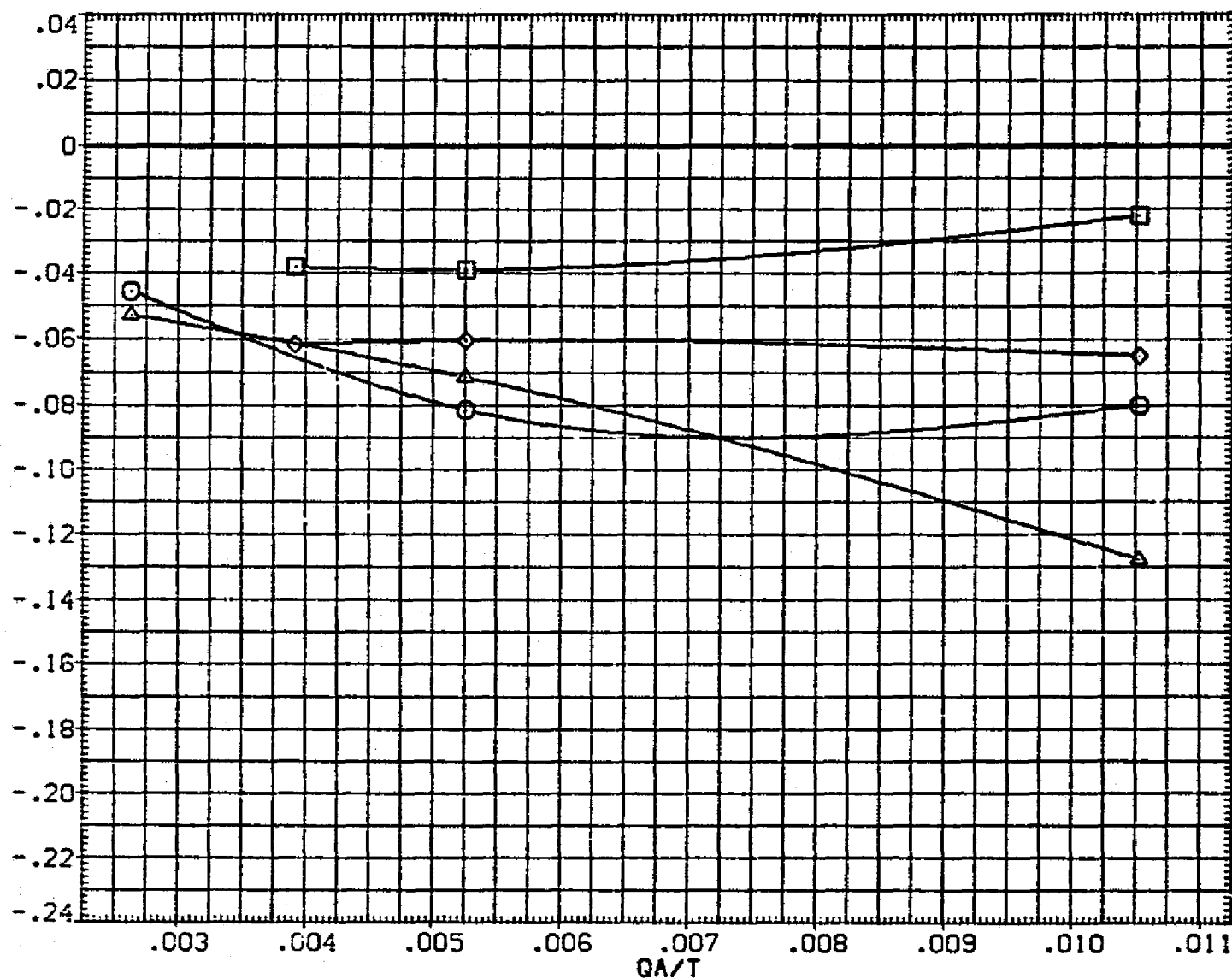


FIGURE 95. AREA RATIO EFFECTS, L/H SIDE FIRING JETS
(A) ALPHA = -8.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA079)	□ 01N33 LARC CFHT 118 (MA-22)
(SJA080)	□ 01N37 LARC CFHT 118 (MA-22)
(SJA081)	△ 01N61 LARC CFHT 118 (MA-22)
(SJA005)	△ 01N85 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BO FLAP	BETA	REFERENCE INFORMATION		
.000	2.000	.000	.000	SREF	2690.0000	50. FT.
.000	2.000	.000	.000	LREF	474.8000	INCHES
.000	2.000	.000	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	0100	

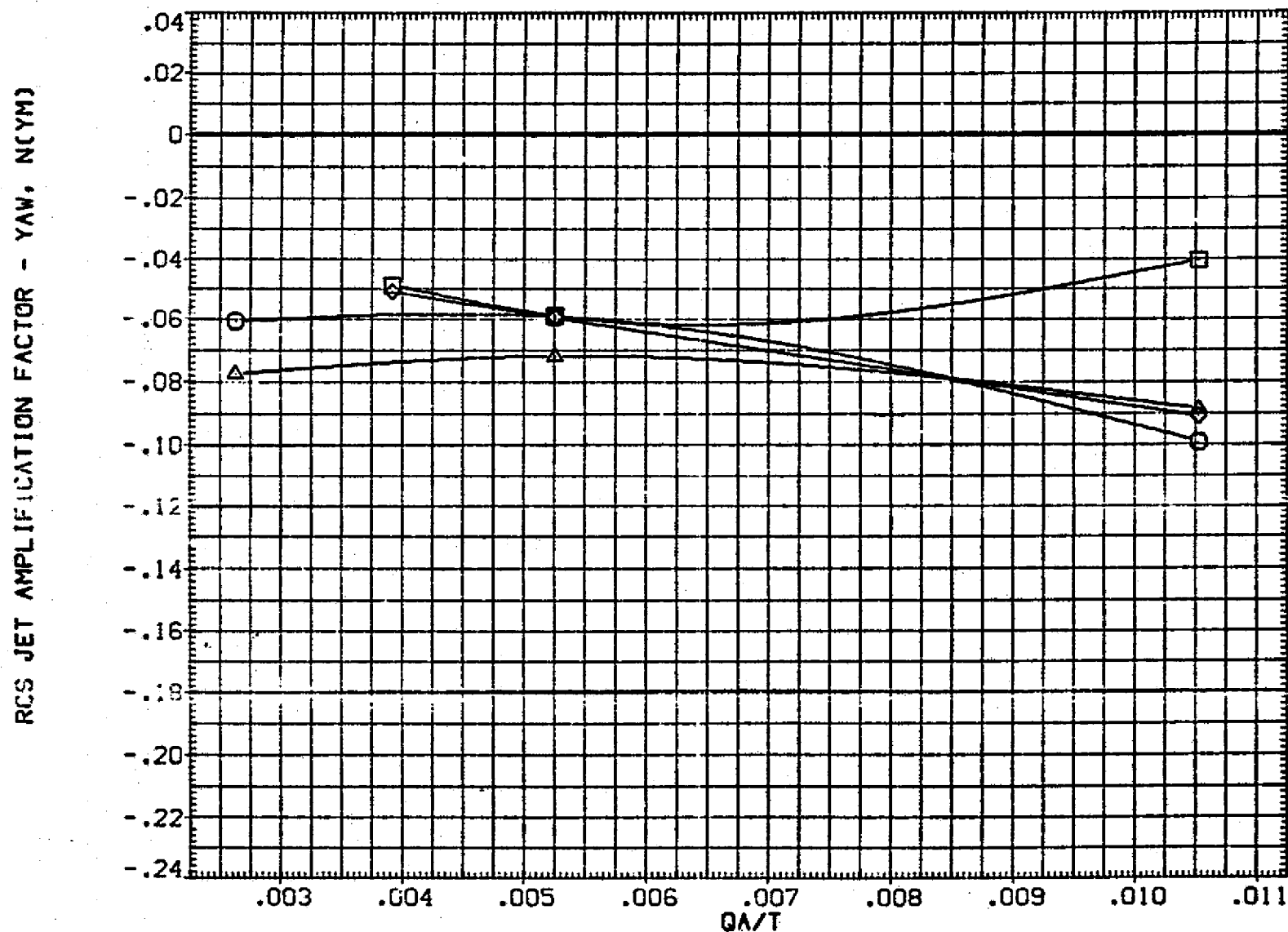


FIGURE 95. AREA RATIO EFFECTS, L/H SIDE FIRING JETS
(B) ALPHA = -6.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA079)	01N33 LARC CFHT 118 (MA-22)
(SJA080)	01N37 LARC CFHT 118 (MA-22)
(SJA081)	01N61 LARC CFHT 118 (MA-22)
(SJA005)	01N85 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BOFLAP	BETA	REFERENCE INFORMATION
.000	2.000	.000	.000	SREF 2690.0000 SQ. FT.
.000	2.000	.000	.000	LREF 474.8000 INCHES
.000	2.000	.000	.000	BREF 936.6800 INCHES
.000	2.000	.000	.000	XMRP 1076.7000 IN. YC
.000	2.000	.000	.000	YMRP .0000 IN. YD
.000	2.000	.000	.000	ZMRP 375.0000 IN. ZO
				SCALE .0100

RCS JET AMPLIFICATION FACTOR - YAW, N(YM)

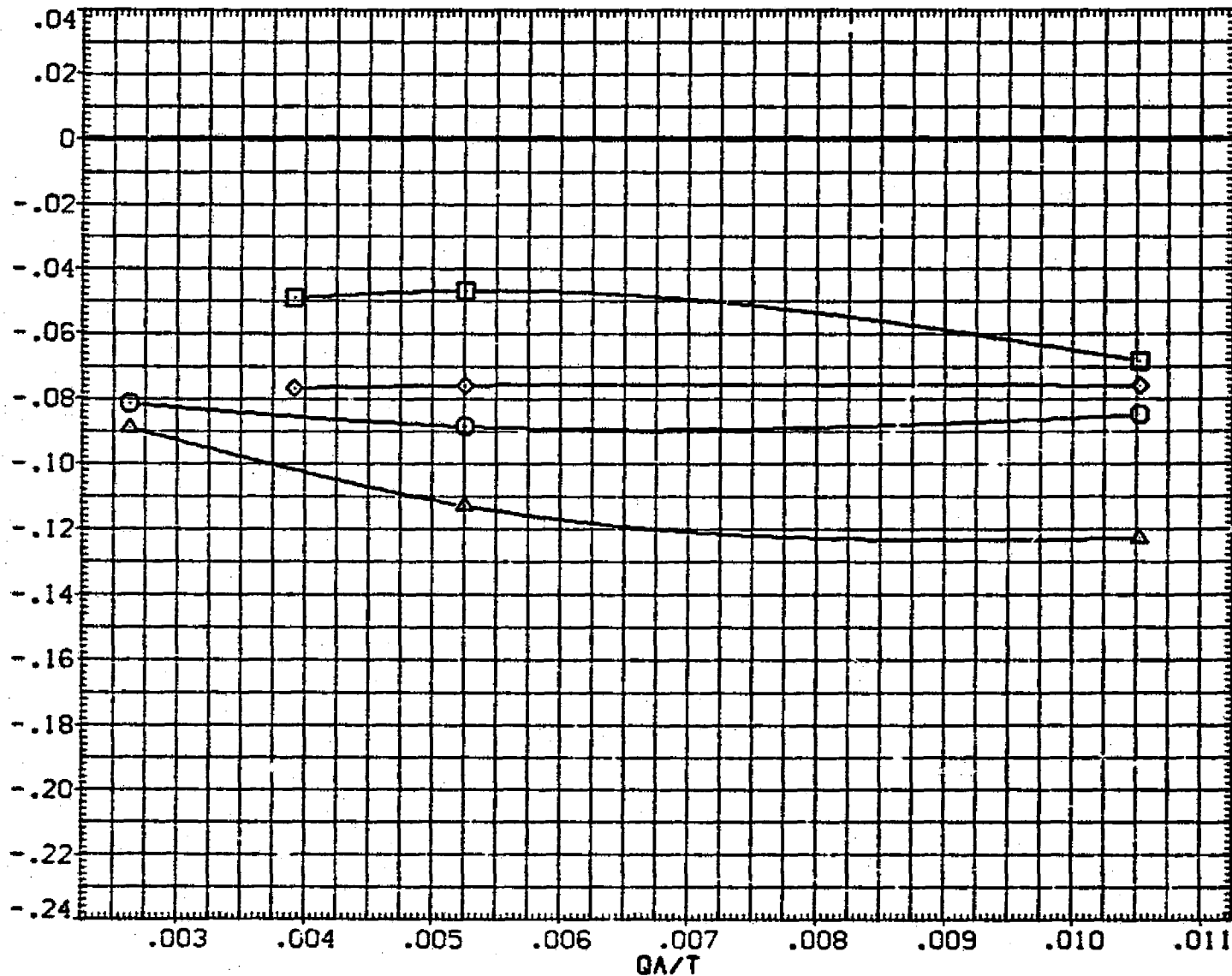


FIGURE 95. AREA RATIO EFFECTS, L/H SIDE FIRING JETS

(C) ALPHA = -4.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA079)	01N33 LARC CFHT 118 (MA-22)
(SJA080)	01N37 LARC CFHT 118 (MA-22)
(SJA081)	01N61 LARC CFHT 118 (MA-22)
(SJA005)	01N85 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BOFLAP	BETA	REFERENCE INFORMATION
.000	2.000	.000	.000	SREF 2690.0000 SQ. FT.
.000	2.000	.000	.000	LREF 474.8000 INCHES
.000	2.000	.000	.000	BREF 936.6800 INCHES
.000	2.000	.000	.000	XMRP 1076.7000 IN. X0
				YMRP .0000 IN. Y0
				ZMRP 375.0000 IN. Z0
				SCALE .0100

RCS JET AMPLIFICATION FACTOR - YAW, NCMH

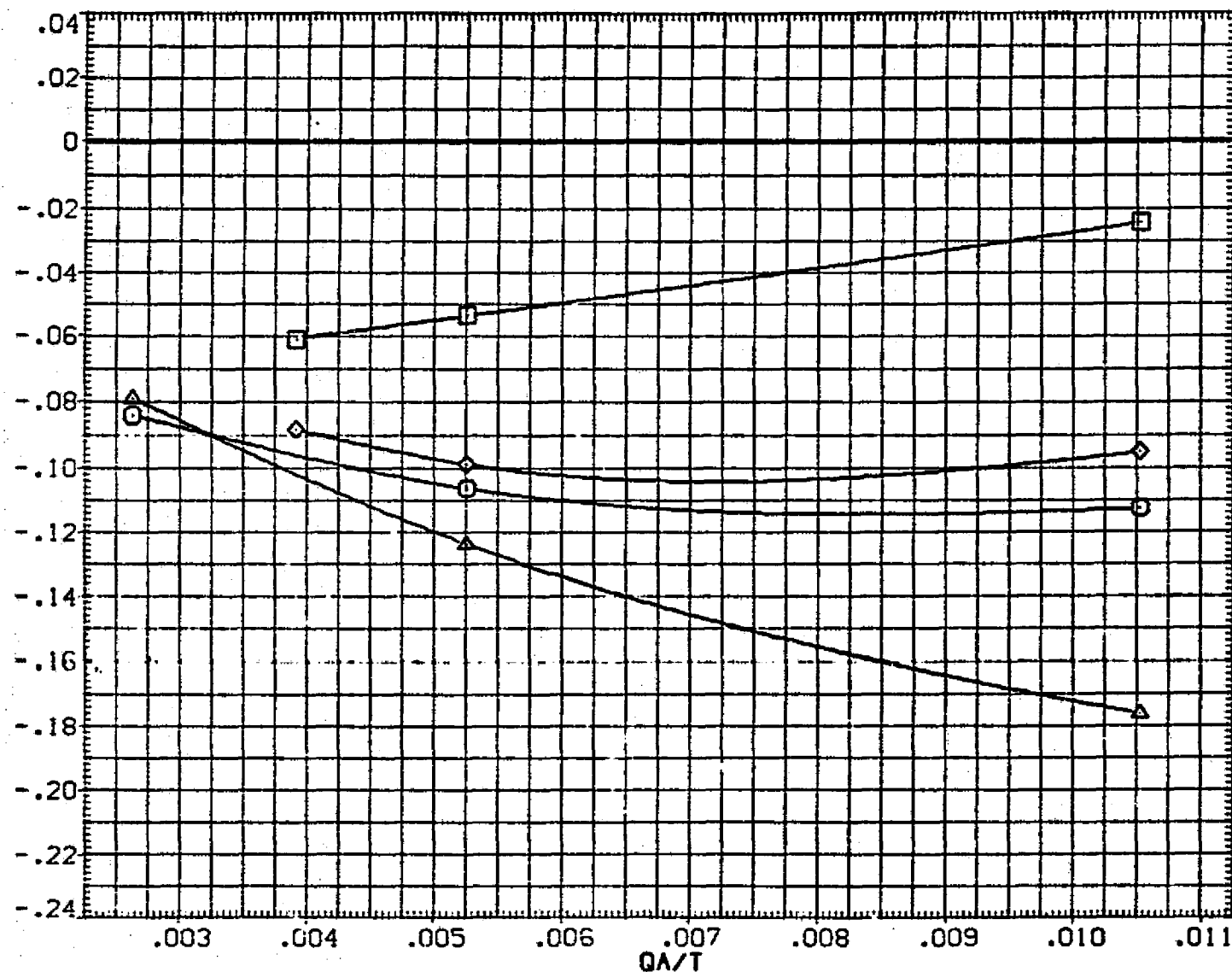


FIGURE 95. AREA RATIO EFFECTS, L/H SIDE FIRING JETS

(D) ALPHA = -2.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA079)	QIN33 LARC CFHT 118 (MA-22)
(SJA080)	QIN37 LARC CFHT 118 (MA-22)
(SJA081)	QIN61 LARC CFHT 118 (MA-22)
(SJA085)	QIN85 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BD FLAP	BETA	REFERENCE INFORMATION		
.000	2.000	.000	.000	SREF	2690.0000	50. FT.
.000	2.000	.000	.000	LREF	474.8000	INCHES
.000	2.000	.000	.000	BREF	935.6800	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.0100	

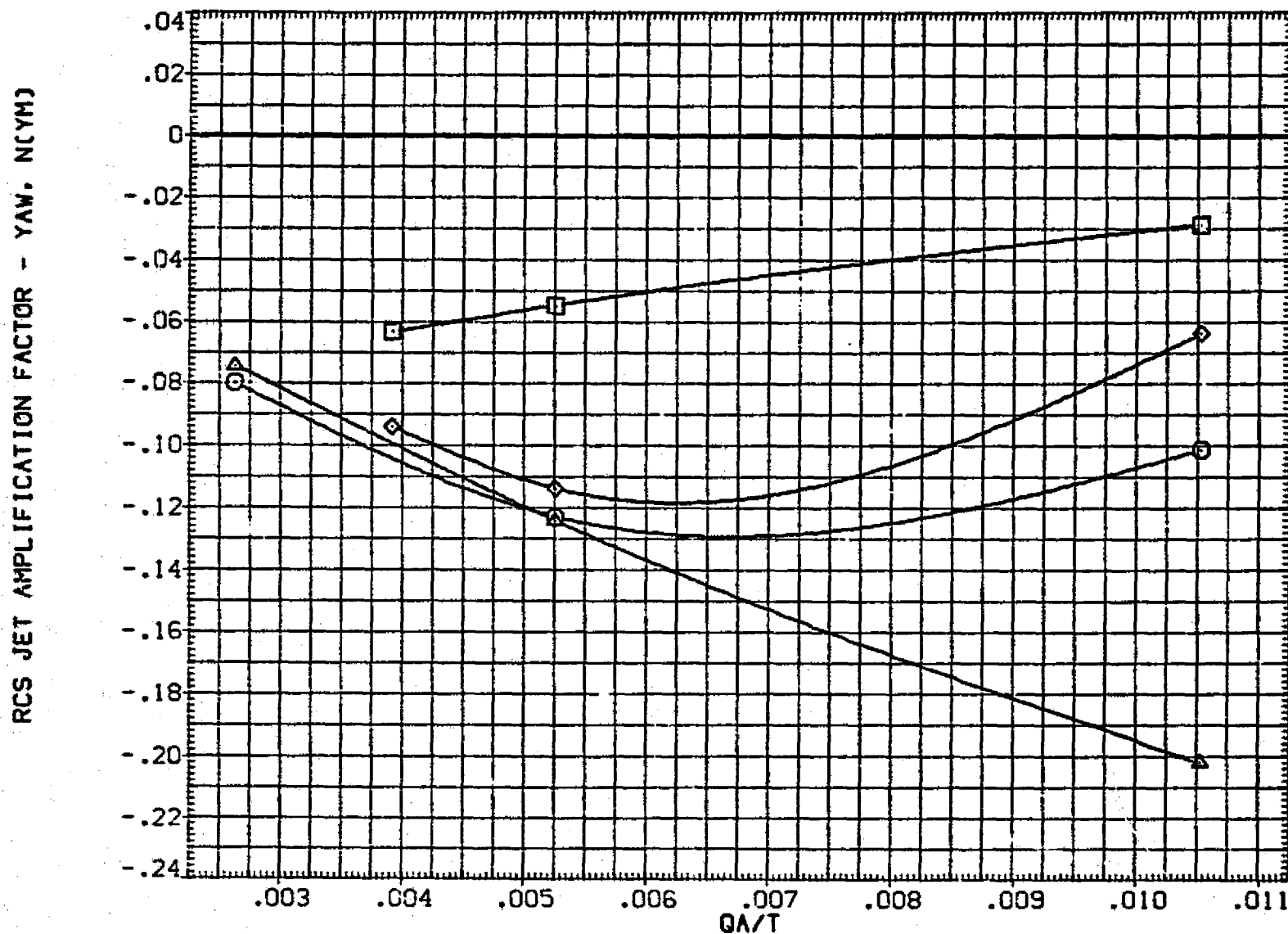


FIGURE 95. AREA RATIO EFFECTS, L/H SIDE FIRING JETS

(E) ALPHA = .00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA079)	01N33 LARC CFHT 118 (MA-22)
(SJA080)	01N37 LARC CFHT 118 (MA-22)
(SJA081)	01N61 LARC CFHT 118 (MA-22)
(SJA005)	01N85 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BOFLAP	BETA	REFERENCE INFORMATION		
.000	2.000	.000	.000	SREF	2690.0000	50. FT.
.000	2.000	.000	.000	LREF	474.8000	INCHES
.000	2.000	.000	.030	BREF	936.6900	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.0100	

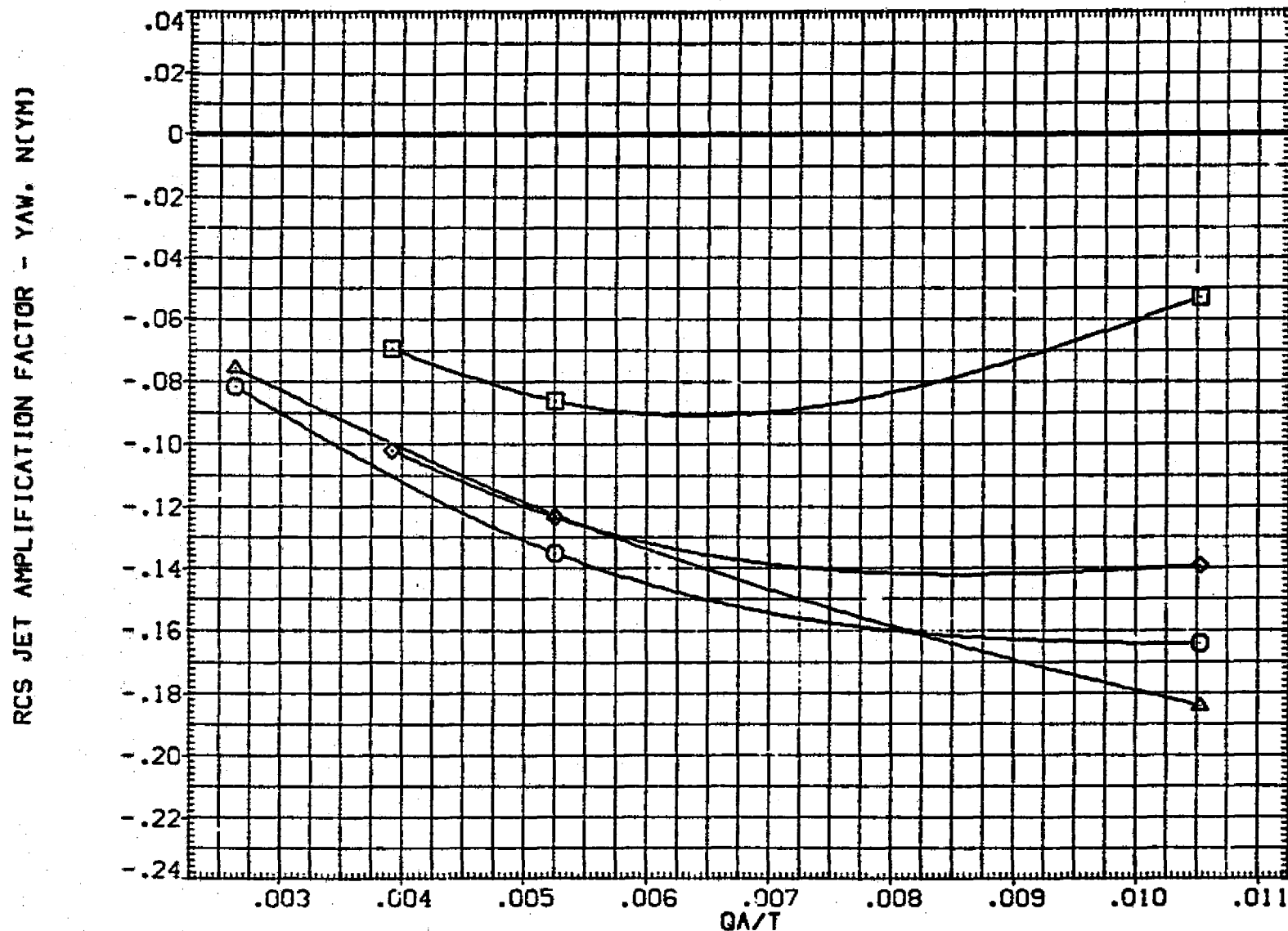


FIGURE S5. AREA RATIO EFFECTS, L/H SIDE FIRING JETS
(F) ALPHA = 2.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA079)	01N33 LARC CFHT 118 (MA-22)
(SJA080)	01N37 LARC CFHT 118 (MA-22)
(SJA081)	01N61 LARC CFHT 118 (MA-22)
(SJA005)	01N85 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BOFLAP	BETA	REFERENCE INFORMATION		
.000	2.000	.000	.000	SREF	2690.0000	SQ. FT.
.000	2.000	.000	.000	LREF	474.8000	INCHES
.000	2.000	.000	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - YAW, N(YM)

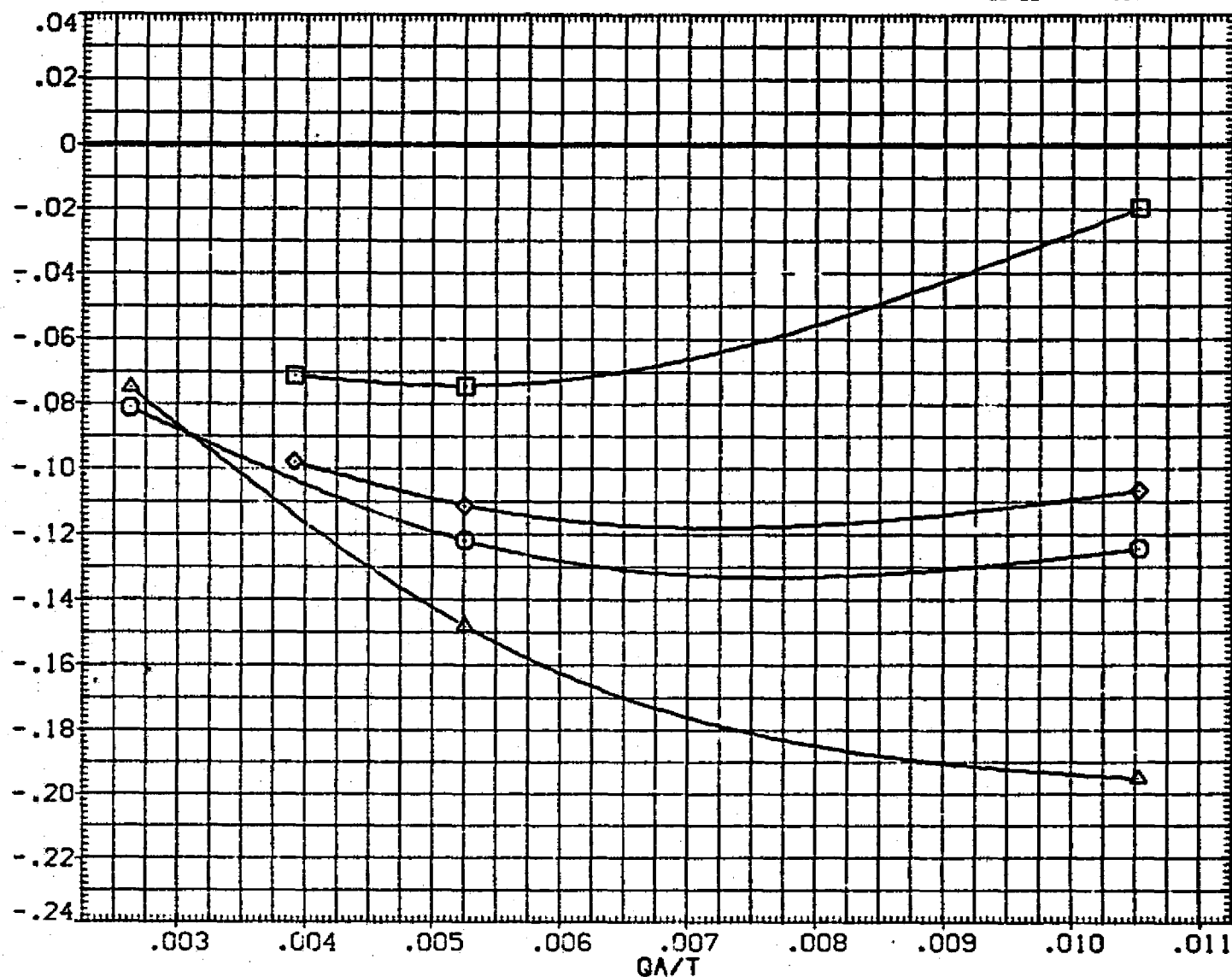


FIGURE 95. AREA RATIO EFFECTS, L/H SIDE FIRING JETS

(G) ALPHA = 4.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
[SJA079]	01N33 LARC CFHT 118 (N-22)
[SJA080]	01N37 LARC CFHT 118 (MA-22)
[SJA081]	01N61 LARC CFHT 118 (MA-22)
[SJA005]	01N85 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BOFI AP	BETA	REFERENCE INFORMATION	
.000	2.000	.000	.000	SREF	2690.0000 SQ. FT.
.000	2.000	.000	.000	LREF	474.8000 INCHES
.000	2.000	.000	.000	BREF	936.6800 INCHES
.000	2.000	.000	.000	XMRP	1076.7000 IN. X0
				YMRP	.0000 IN. Y0
				ZMRP	375.0000 IN. Z0
				SCALE	.0100

RCS JET AMPLIFICATION FACTOR - YAW, N(YM)

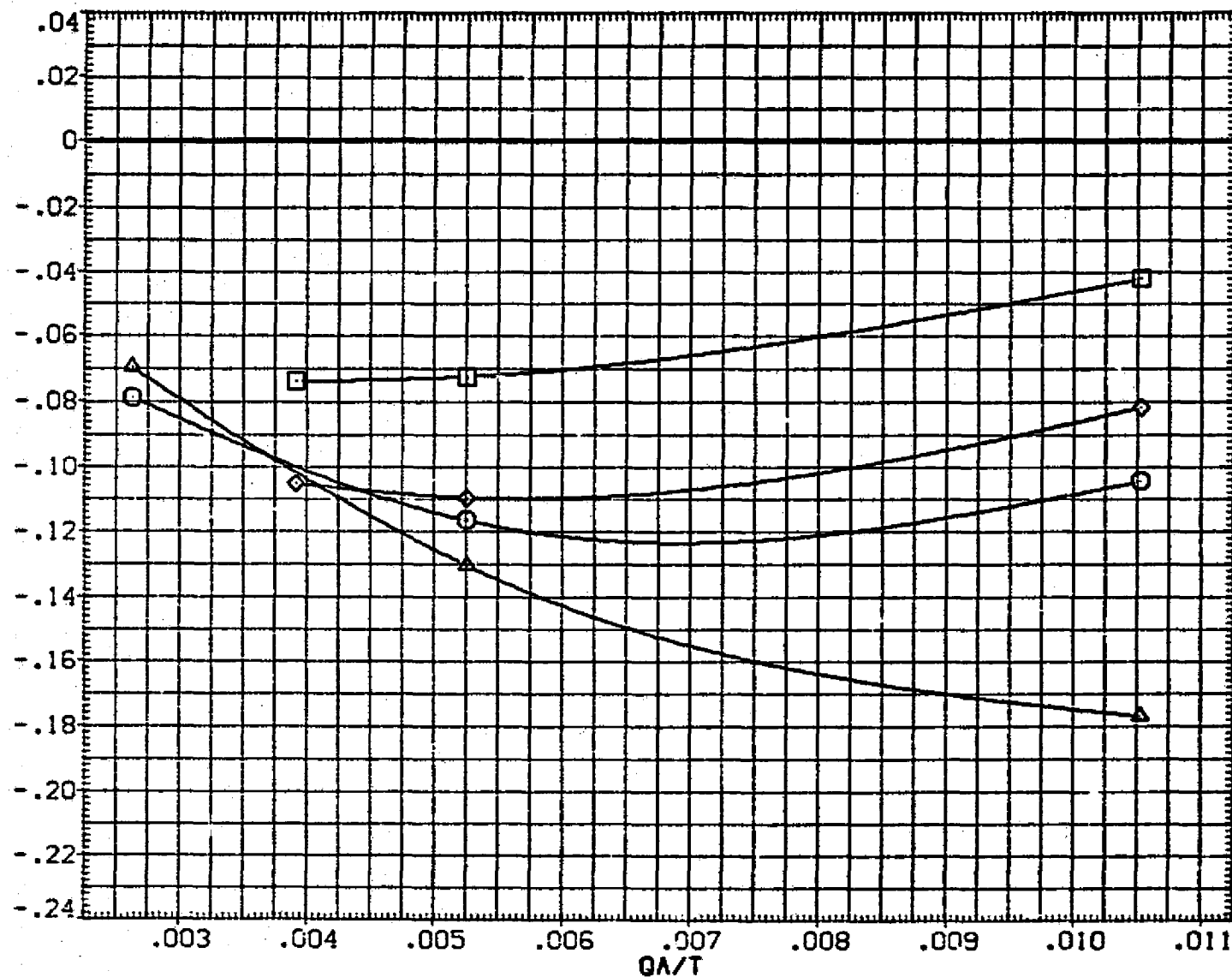


FIGURE 95. AREA RATIO EFFECTS, L/H SIDE FIRING JETS
(H) ALPHA = 6.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA079)	01N33 LARC CFHT 118 (MA-22)
(SJA080)	01N37 LARC CFHT 118 (MA-22)
(SJA081)	01N61 LARC CFHT 118 (MA-22)
(SJA005)	01N85 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BD FLAP	BETA	REFERENCE INFORMATION
.000	2.000	.000	.000	SREF 2650.0000 SQ. FT.
.000	2.000	.000	.000	LREF 474.8000 INCHES
.000	2.000	.000	.000	BREF 936.5800 INCHES
.000	2.000	.000	.000	XMRP 1076.7000 IN. X0
				YMRP .0000 IN. Y0
				ZMRP 375.0000 IN. Z0
				SCALE .0100

RCS JET AMPLIFICATION FACTOR - YAW, N(CYM)

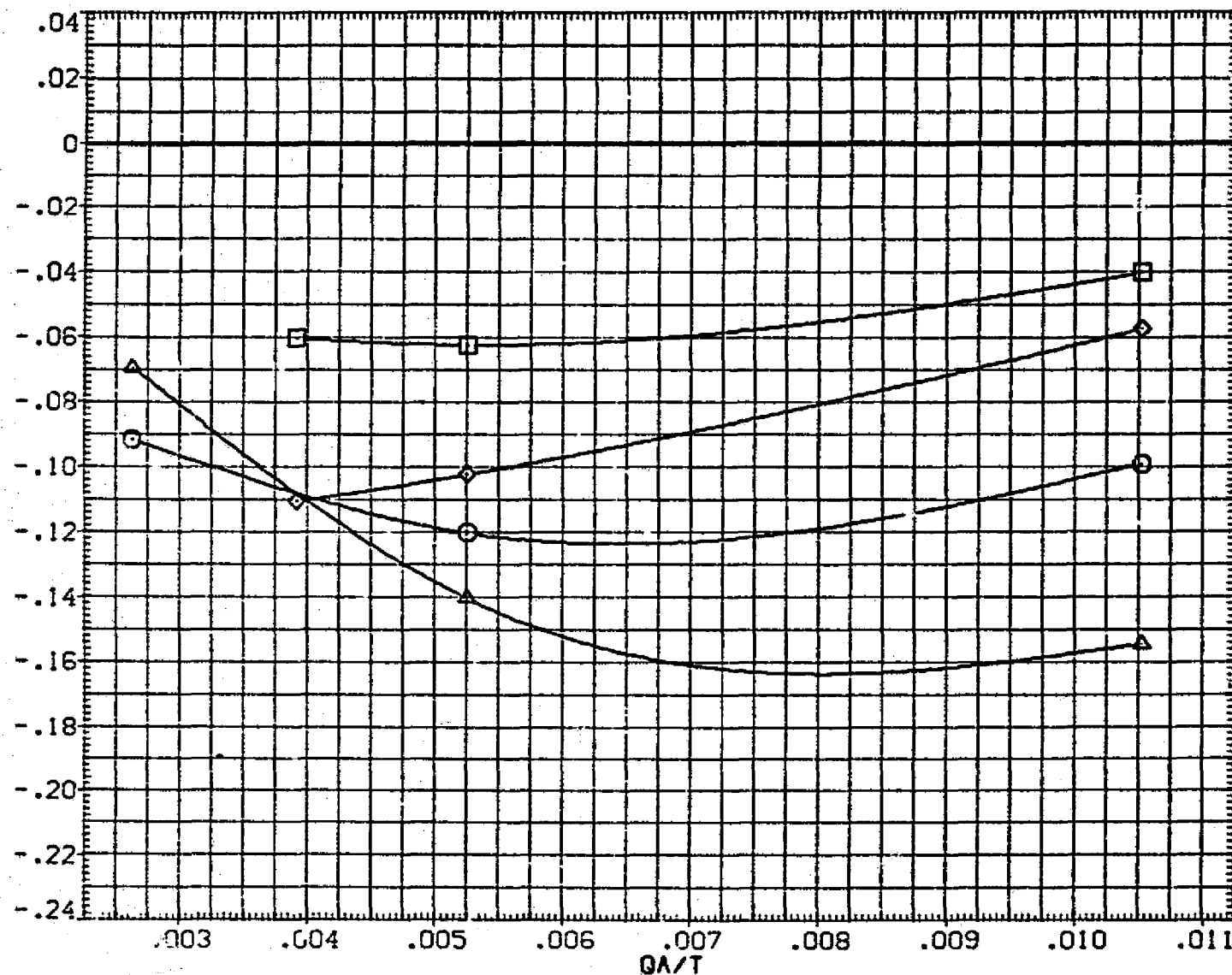


FIGURE 95. AREA RATIO EFFECTS, L/H SIDE FIRING JETS

(1) ALPHA = 8.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA079)	01N33 LARC CFHT 118 (MA-22)
(SJA080)	01N37 LARC CFHT 118 (MA-22)
(SJA081)	01N61 LARC CFHT 118 (MA-22)
(SJA005)	01N85 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BOFLAP	BETA	REFERENCE INFORMATION
.000	2.000	.000	.000	SREF 2690.0000 SQ. FT.
.000	2.000	.000	.000	LREF 474.8000 INCHES
.000	2.000	.000	.000	BREF 936.6800 INCHES
.000	2.000	.000	.000	XMRP 1076.7000 IN. X0
				YMRP .0000 IN. Y0
				ZMRP 375.0000 IN. Z0
				SCALE .0100

RCS JET AMPLIFICATION FACTOR - YAW, NCM)

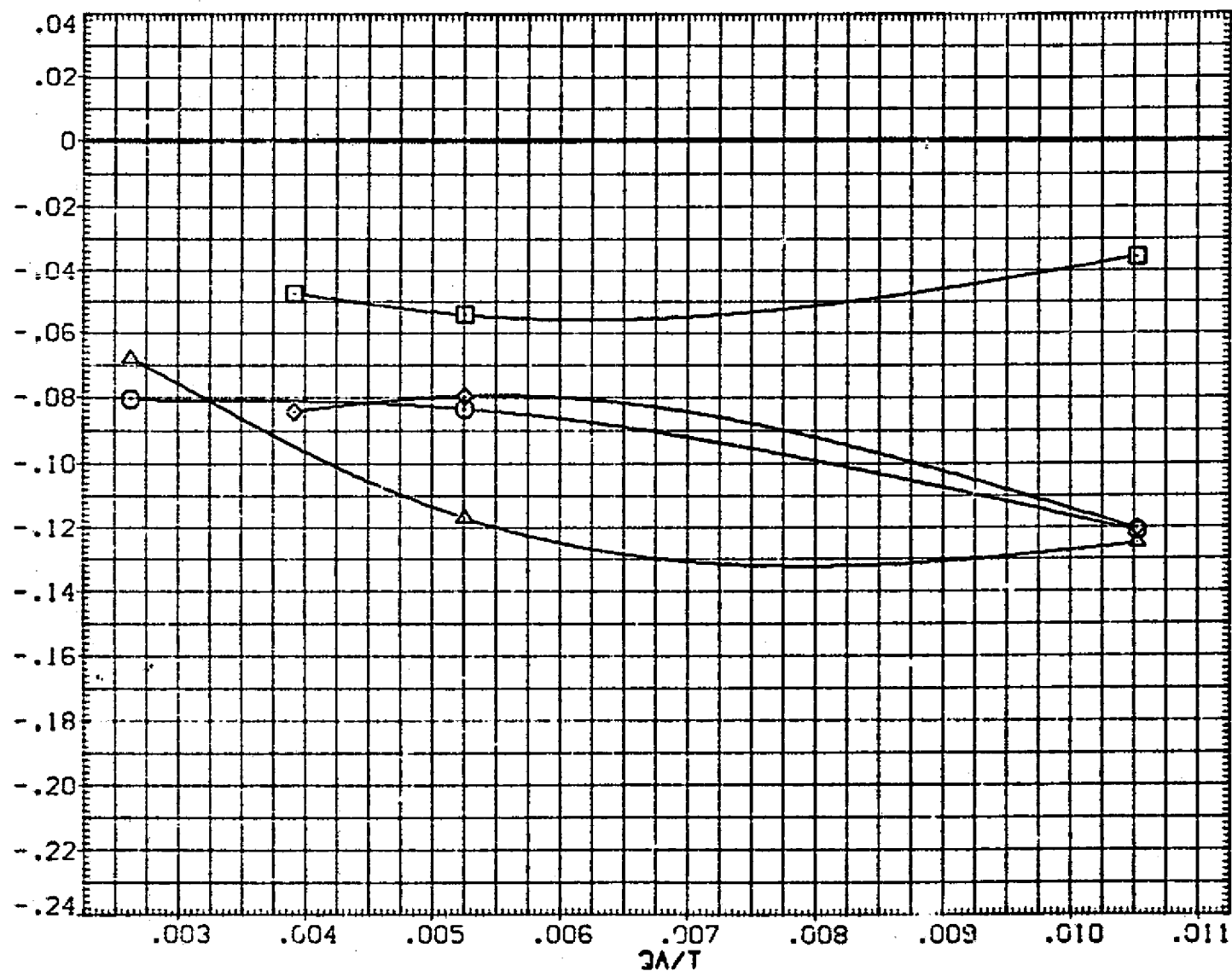


FIGURE 95. AREA RATIO EFFECTS, L/H SIDE FIRING JETS
(J)ALPHA = 10.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA079)	01N33 LARC CFHT 118 (MA-22)
(SJA080)	01N37 LARC CFHT 118 (MA-22)
(SJA081)	01N61 LARC CFHT 118 (MA-22)
(SJA005)	01N85 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BD FLAP	BETA	REFERENCE INFORMATION		
.000	2.000	.000	.000	SREF	2690.0000	50. FT.
.000	2.000	.000	.000	LREF	474.8000	INCHES
.000	2.000	.000	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - YAW, N(°)

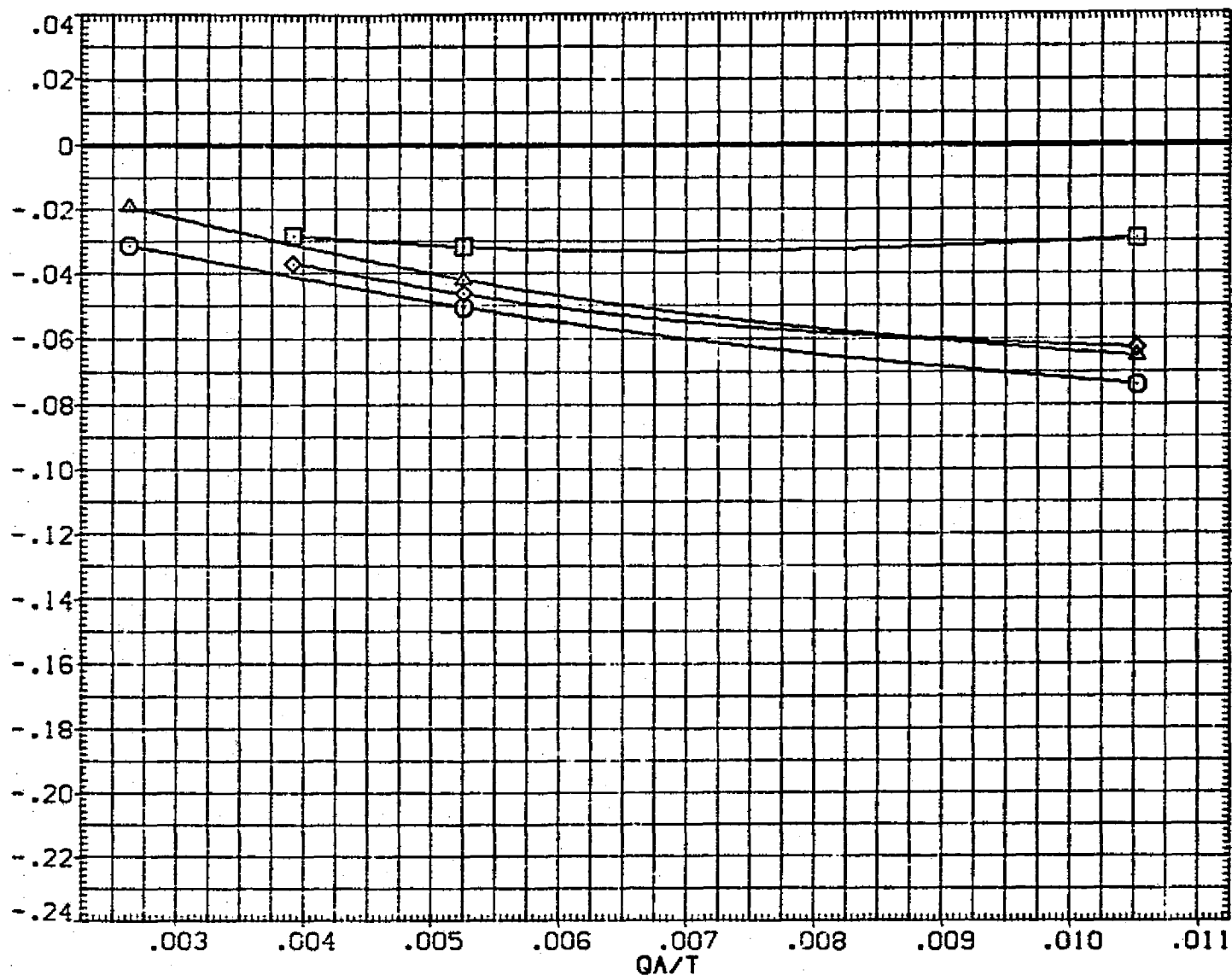


FIGURE 95. AREA RATIO EFFECTS, L/H SIDE FIRING JETS

(K) ALPHA = 15.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA079)	01N33 LARC CFHT 118 (MA-22)
(SJA080)	01N37 LARC CFHT 118 (MA-22)
(SJA081)	01N61 LARC CFHT 118 (MA-22)
(SJA005)	01N85 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BOFLAP	BETA	REFERENCE INFORMATION
.000	2.000	.000	.000	SREF 2690.0000 SQ. FT.
.000	2.000	.000	.000	LREF 474.8000 INCHES
.000	2.000	.000	.000	BREF 936.6800 INCHES
.000	2.000	.000	.000	XMRP 1076.7000 IN. X0
				YMRP .0000 IN. Y0
				ZMRP 375.0000 IN. Z0
				SCALE .0100

RCS JET AMPLIFICATION FACTOR - YAW, NCYM

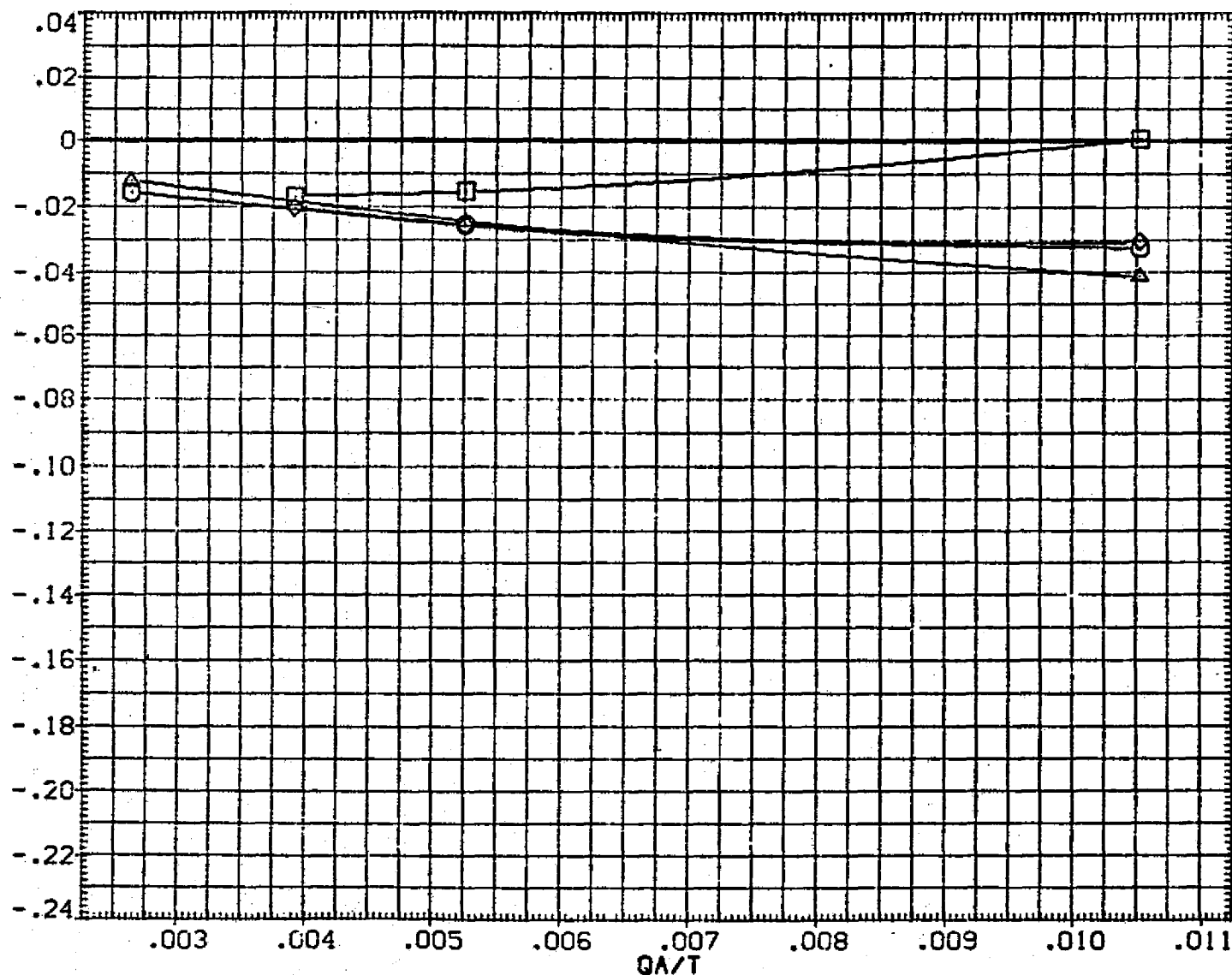


FIGURE 95. AREA RATIO EFFECTS, L/H SIDE FIRING JETS
(L) ALPHA = 20.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA079)	01N33 LARC CFHT 118 (MA-22)
(SJA080)	01N37 LARC CFHT 118 (MA-22)
(SJA081)	01N61 LARC CFHT 118 (MA-22)
(SJA005)	01N85 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BOFLAP	BETA	REFERENCE INFORMATION
.000	2.000	.000	.000	SREF 2690.0000 SQ. FT.
.000	2.000	.000	.000	LREF 474.8000 INCHES
.000	2.000	.000	.000	BREF 936.6800 INCHES
.000	2.000	.000	.000	XMRP 1076.7000 IN. X0
				YMRP .0000 IN. Y0
				ZMRP 375.0000 IN. Z0
				SCALE .0100

RCS JET AMPLIFICATION FACTOR - YAW, N(YM)

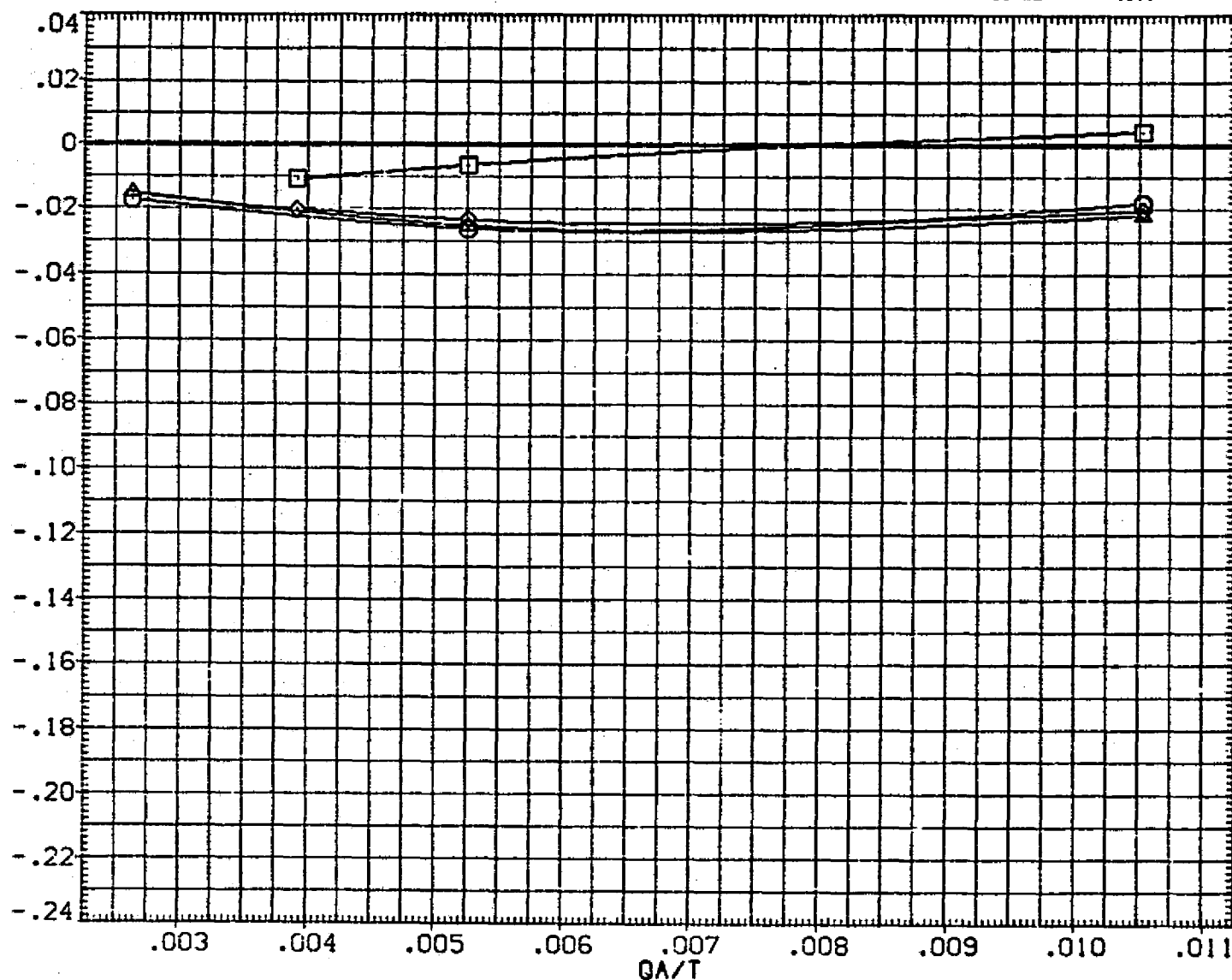


FIGURE 95. AREA RATIO EFFECTS, L/H SIDE FIRING JETS
(M) ALPHA = 25.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA079)	01N33 LARC CFHT 118 (MA-22)
(SJA080)	01N37 LARC CFHT 118 (MA-22)
(SJA081)	01N61 LARC CFHT 118 (MA-22)
(SJA005)	01N85 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BOFLAP	BETA	REFERENCE INFORMATION		
.000	2.000	.000	.000	SREF	2690.0000	50. FT.
.000	2.000	.000	.000	LREF	474.8000	INCHES
.000	2.000	.000	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - YAW, NCYM)

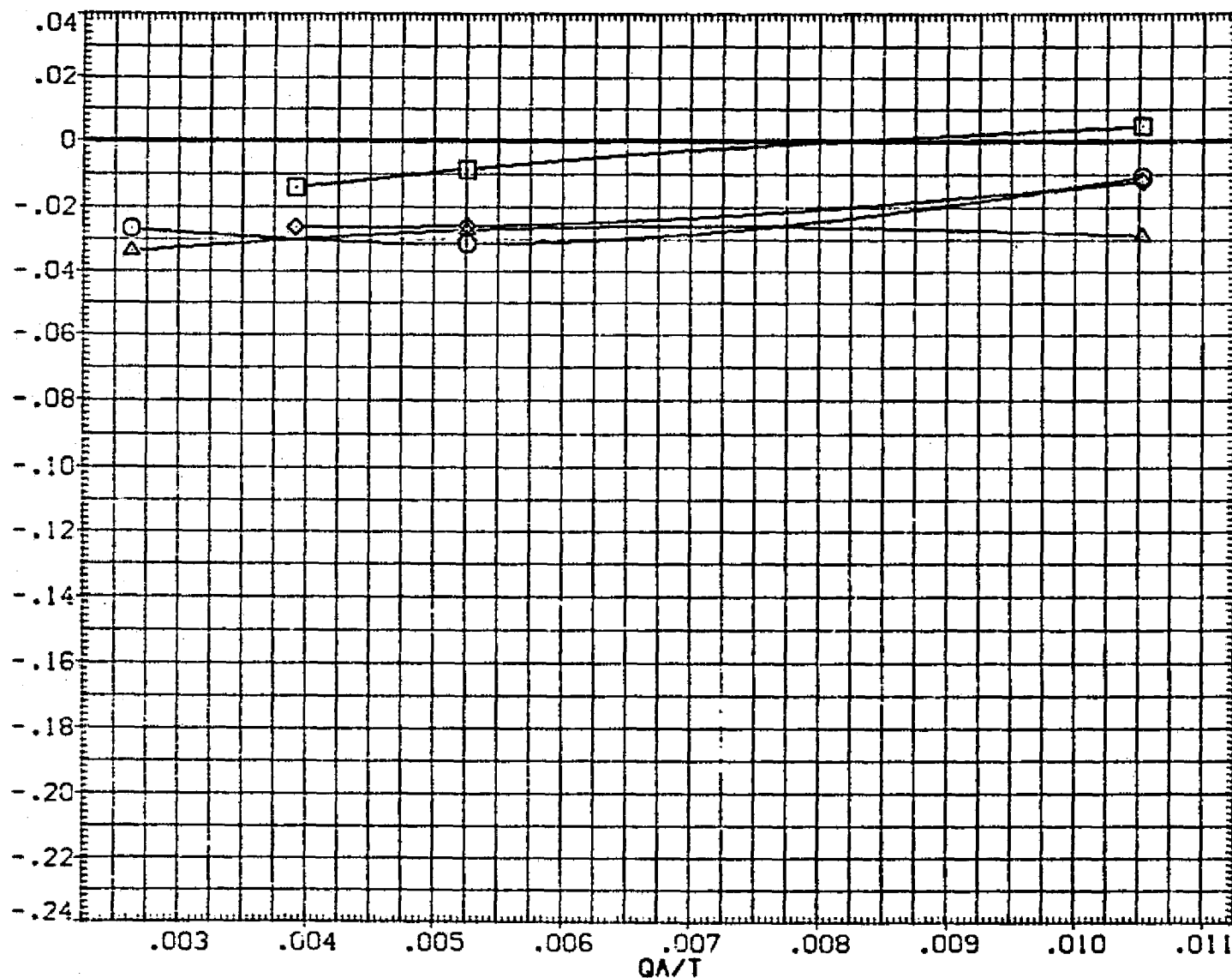


FIGURE 95. AREA RATIO EFFECTS, L/H SIDE FIRING JETS
(N)ALPHA = 30.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	Nº.JET	BDFLAP	BETA	REFERENCE INFORMATION	
(SJA079)	01N33 LARC CFHT 118 (MA-22)	.000	2.000	.000	.000	SREF	2690.0000 SQ.FT.
(SJA080)	01N37 LARC CFHT 118 (MA-22)	.000	2.000	.000	.000	LREF	474.8000 INCHES
(SJA081)	01N61 LARC CFHT 118 (MA-22)	.000	2.000	.000	.000	BREF	936.6800 INCHES
(SJA005)	01N85 LARC CFHT 118 (MA-22)	.000	2.000	.000	.000	XMRP	1076.7000 IN. X0
						YMRP	.0000 IN. Y0
						ZMRP	375.0000 IN. Z0
						SCALE	.0100

RCS JET AMPLIFICATION FACTOR - YAW, N(°)M

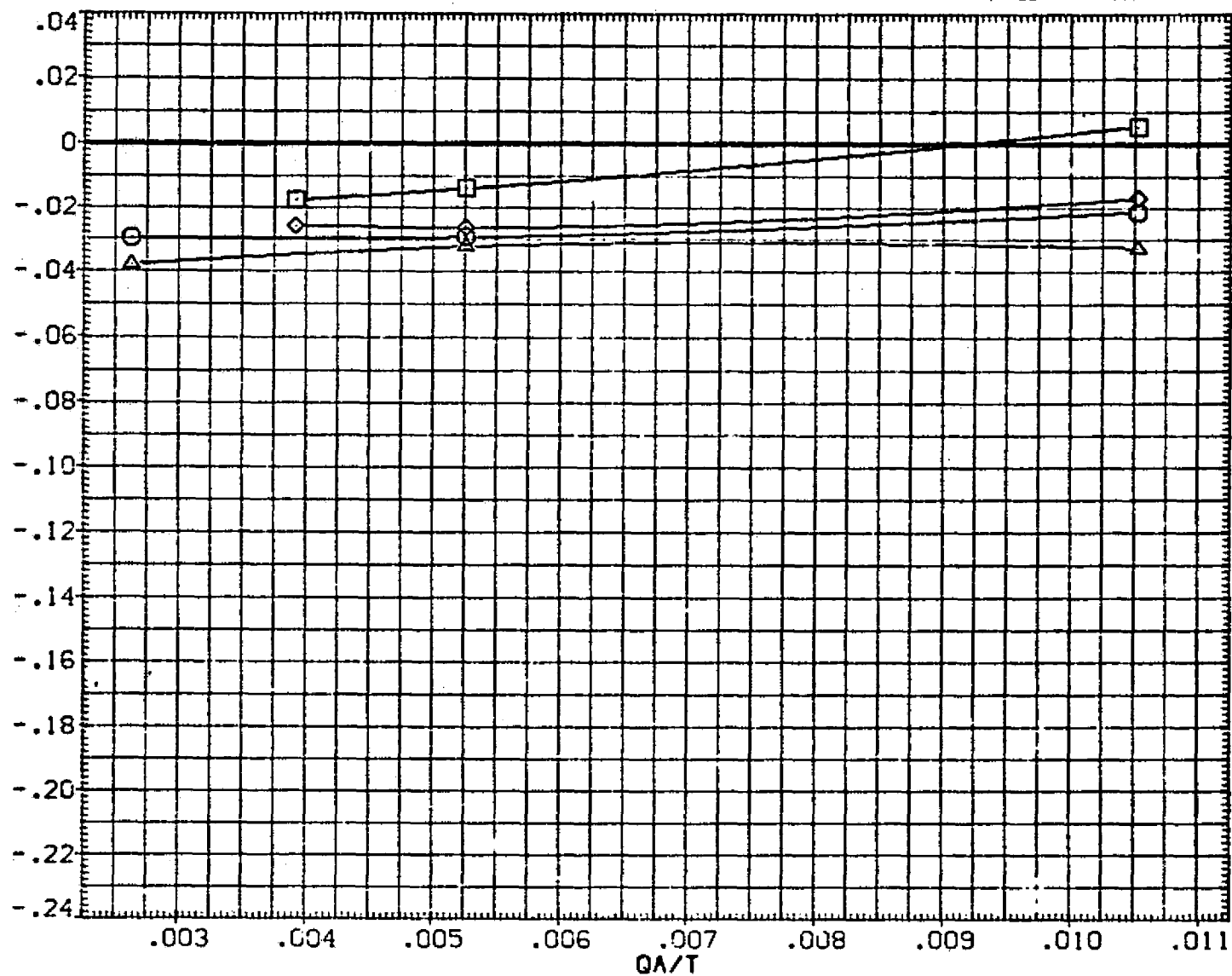


FIGURE 95. AREA RATIO EFFECTS, L/H SIDE FIRING JETS

(O)ALPHA = 35.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA079)	□ 01N33 LARC CFHT 118 (MA-22)
(SJA080)	□ 01N37 LARC CFHT 118 (MA-22)
(SJA081)	◇ 01N61 LARC CFHT 118 (MA-22)
(SJA005)	△ 01N85 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BD FLAP	BETA	REFERENCE INFORMATION		
.000	2.000	.000	.000	SREF	2690.0000	50. FT.
.000	2.000	.000	.000	LREF	474.8000	INCHES
.000	2.000	.000	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XM RP	1076.7000	IN. X0
				YM RP	.0000	IN. Y0
				ZM RP	375.0000	IN. Z0
				SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - SIDE FORCE, N(SF)

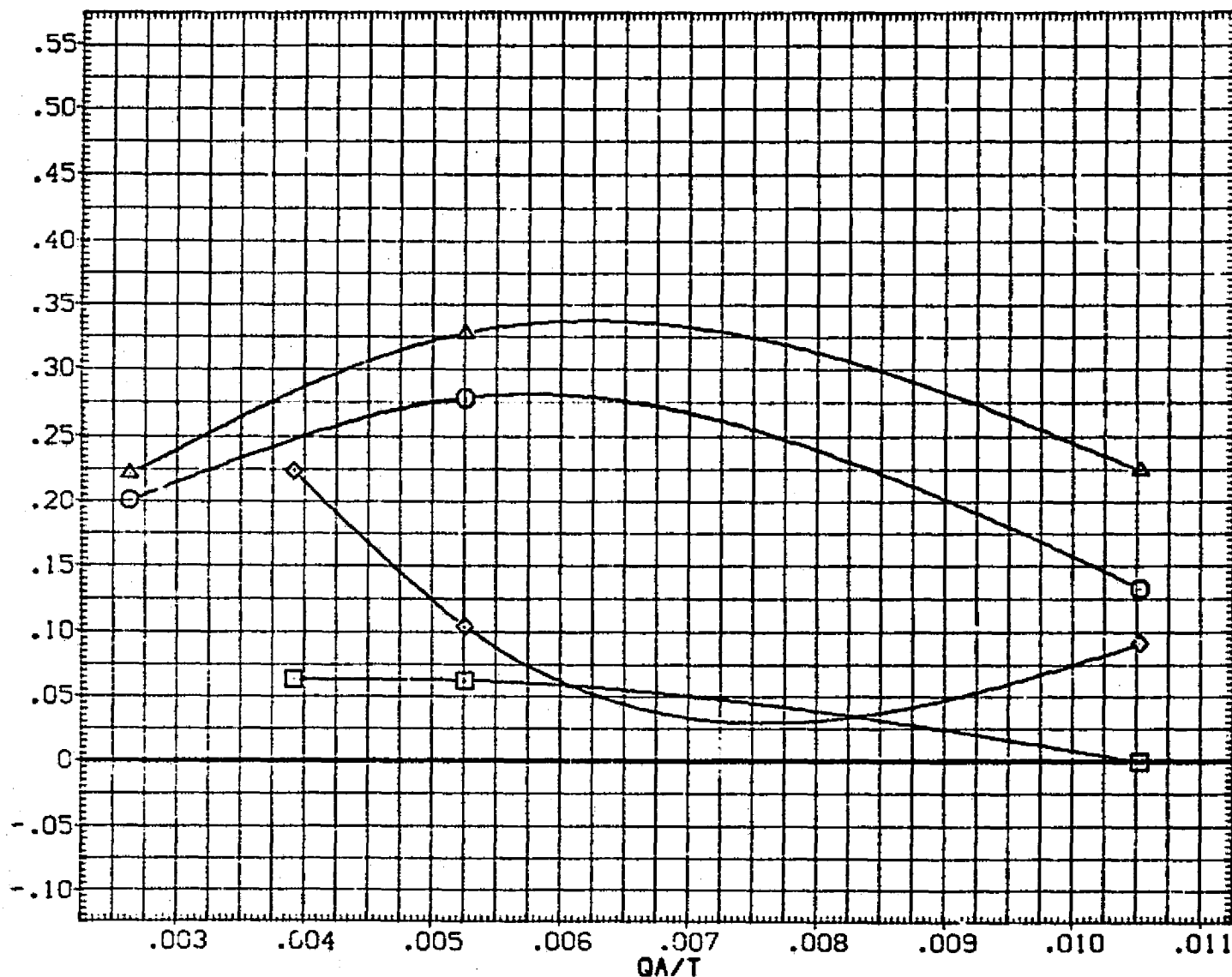


FIGURE 95. AREA RATIO EFFECTS, L/H SIDE FIRING JETS
(A) ALPHA = -8.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA079)	01N33 LARC CFHT 118 (MA-22)
(SJA080)	01N37 LARC CFHT 118 (MA-22)
(SJA081)	01N61 LARC CFHT 118 (MA-22)
(SJA005)	01N85 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BOFLAP	BETA	REFERENCE INFORMATION		
.000	2.000	.000	.000	SREF	2690.0000	SQ. FT.
.000	2.000	.000	.000	LREF	474.8000	INCHES
.000	2.000	.000	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - SIDE FORCE, N(SF)

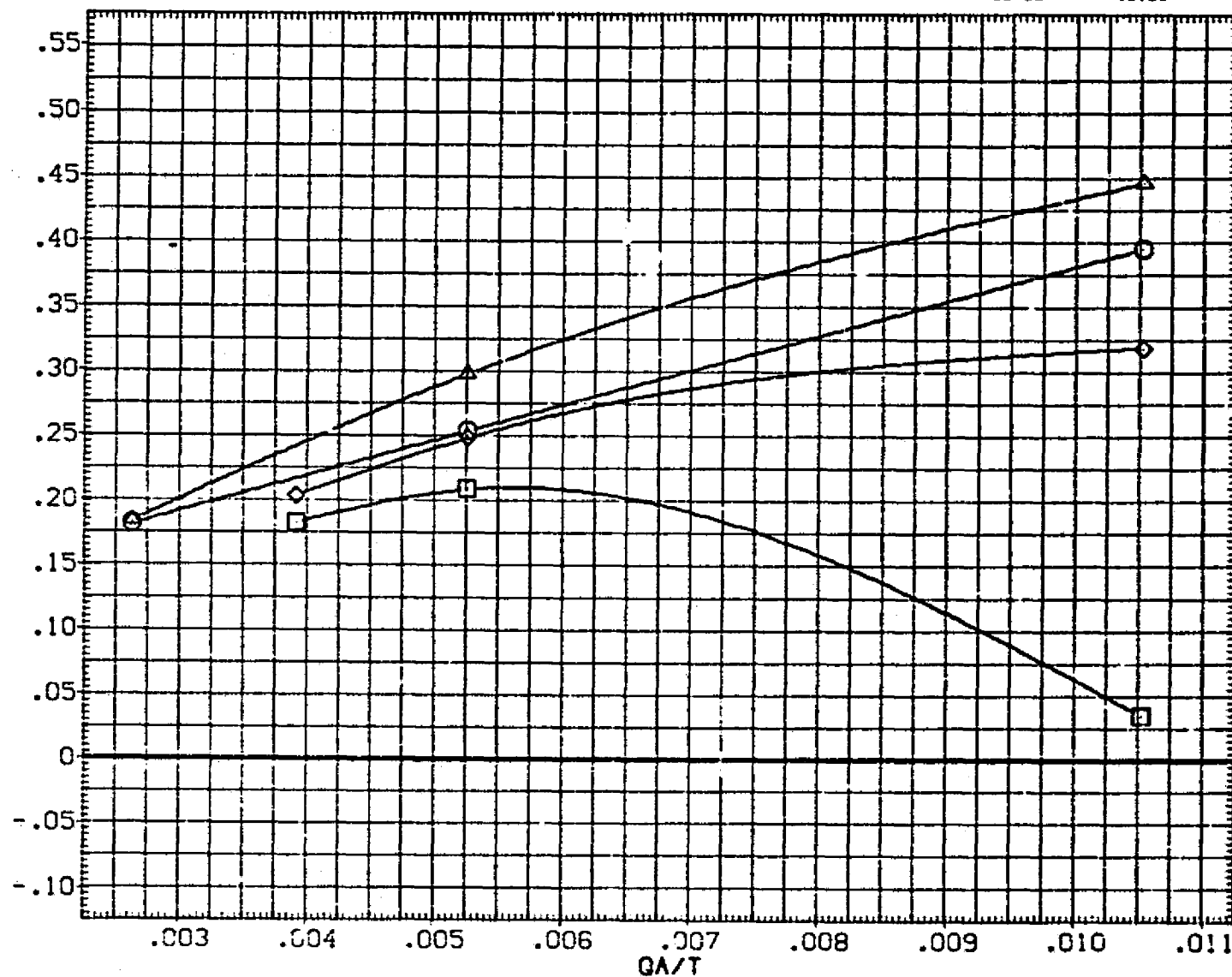


FIGURE 95. AREA RATIO EFFECTS, L/H SIDE FIRING JETS
(B) ALPHA = -6.00

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION
(SJA079)	□	GIN33 LARC CFHT 118 (MA-22)
(SJA080)	○	GIN37 LARC CFHT 118 (MA-22)
(SJA081)	△	GIN61 LARC CFHT 118 (MA-22)
(SJA005)	◇	GIN95 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BOFLAP	BETA	REFERENCE INFORMATION		
.000	2.000	.000	.000	SREF	2690.0000	50. FT.
.000	2.000	.000	.000	LREF	474.8000	INCHES
.000	2.000	.000	.000	BREF	886.6800	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - SIDE FORCE, N(SF)

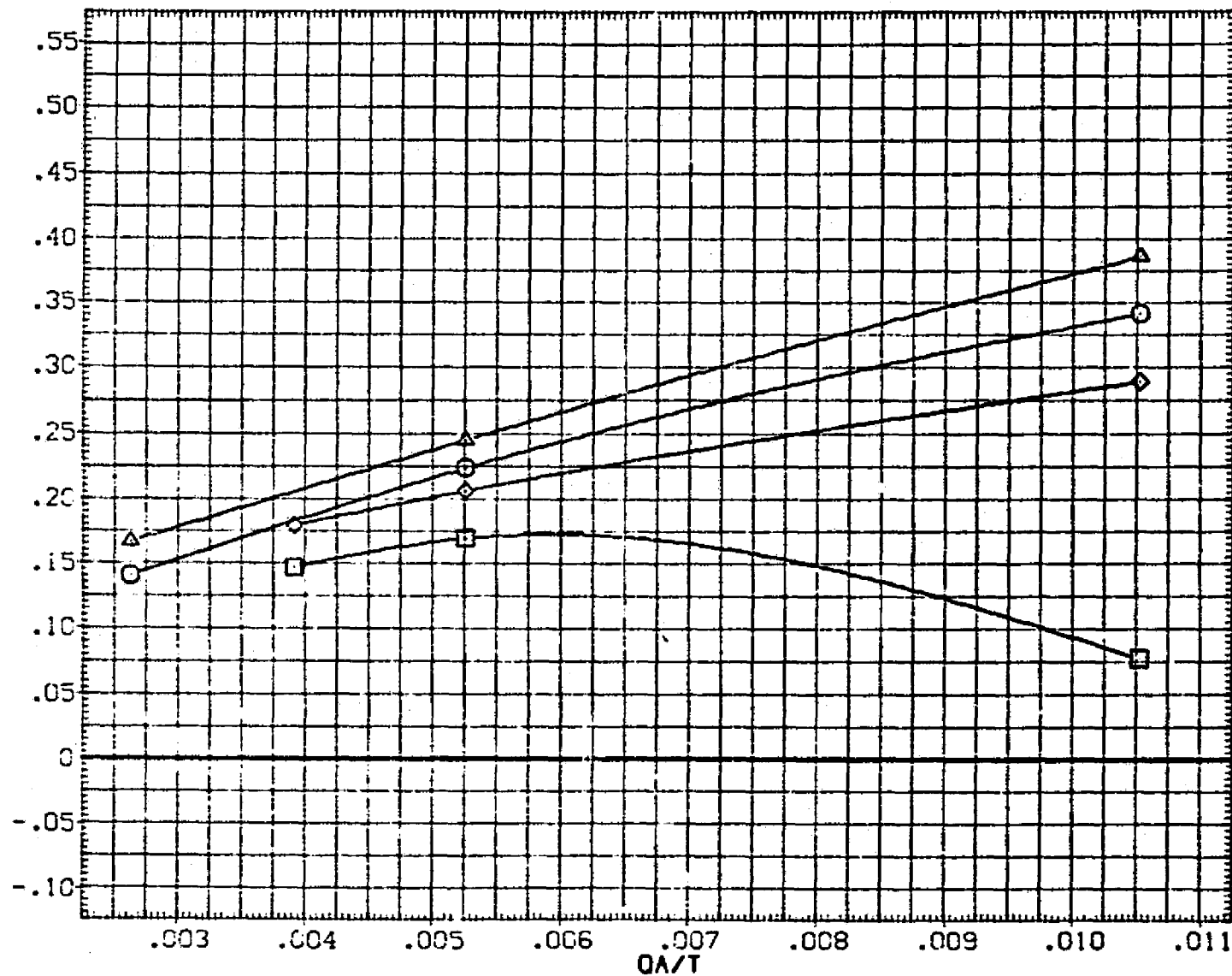


FIGURE 95. AREA RATIO EFFECTS, L/H SIDE FIRING JETS

(C) ALPHA = -4.00

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION
(SJA079)	□	01N33 LARC CFHT 118 (MA-22)
(SJA080)	○	01N37 LARC CFHT 118 (MA-22)
(SJA081)	◇	01N61 LARC CFHT 118 (MA-22)
(SJA005)	△	01N85 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BOFLAP	BETA	REFERENCE INFORMATION
.000	2.000	.000	.000	SREF 2690.0000 SQ. FT.
.000	2.000	.000	.000	LREF 474.8000 INCHES
.000	2.000	.000	.000	BREF 936.6800 INCHES
.000	2.000	.000	.000	XMRP 1076.7000 IN. X0
.000	2.000	.000	.000	YMRP .0000 IN. Y0
.000	2.000	.000	.000	ZMRP 375.0000 IN. Z0
				SCALE .0100

RCS JET AMPLIFICATION FACTOR - SIDE FORCE, N(SF)

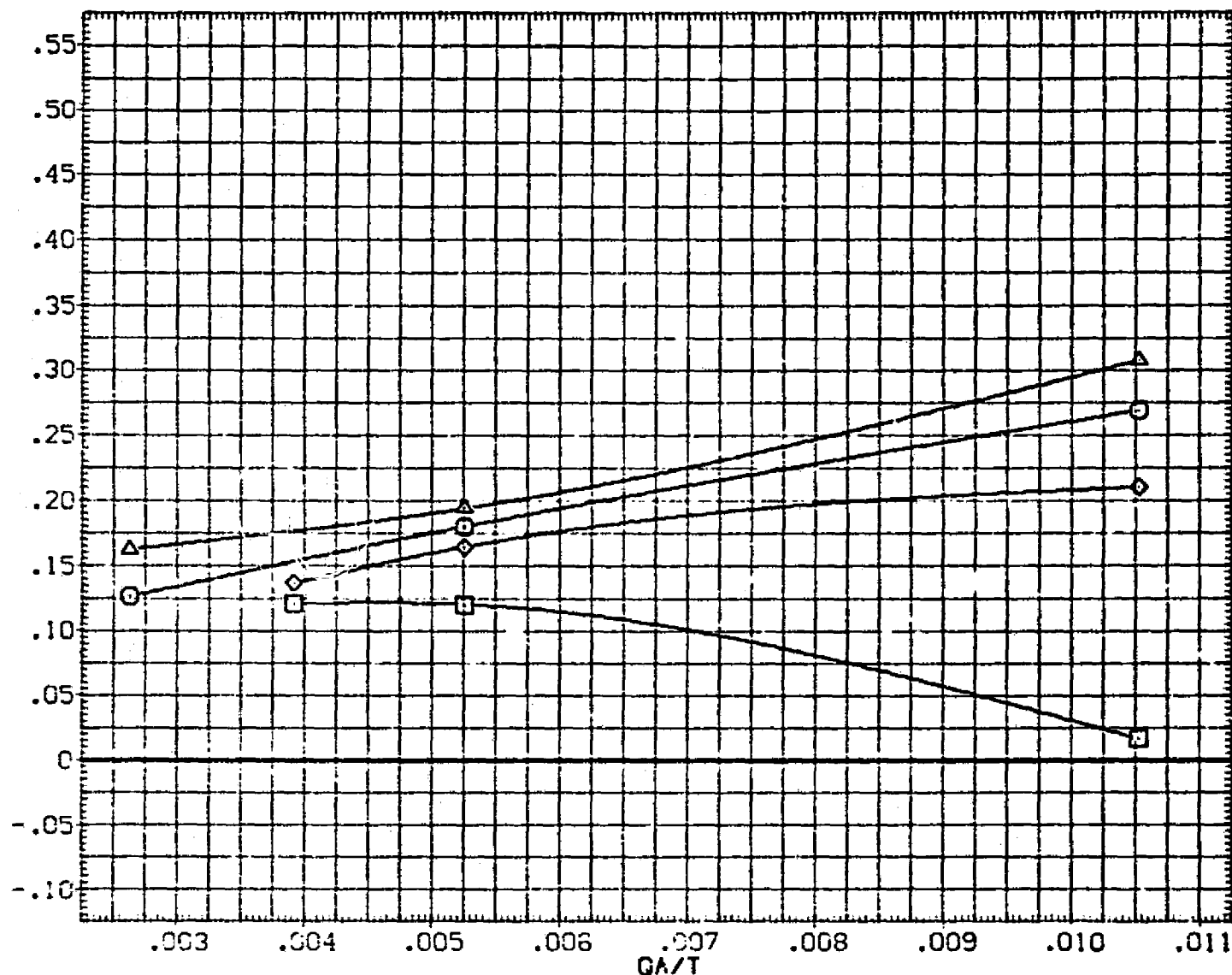


FIGURE 95. AREA RATIO EFFECTS, L/H SIDE FIRING JETS

(D) ALPHA = -2.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
[SJA079] □	G1N33 LARC CFHT 118 (MA-22)
[SJA080] □	G1N37 LARC CFHT 118 (MA-22)
[SJA391] ◇	G1N61 LARC CFHT 118 (MA-22)
[SJA005] △	G1N85 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BOFLAP	BETA	REFERENCE INFORMATION		
.000	2.000	.000	.000	SREF	2690.0000	50. FT.
.000	2.000	.000	.000	LREF	474.8000	INCHES
.000	2.000	.000	.000	BREF	336.6800	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - SIDE FORCE, N(SF)

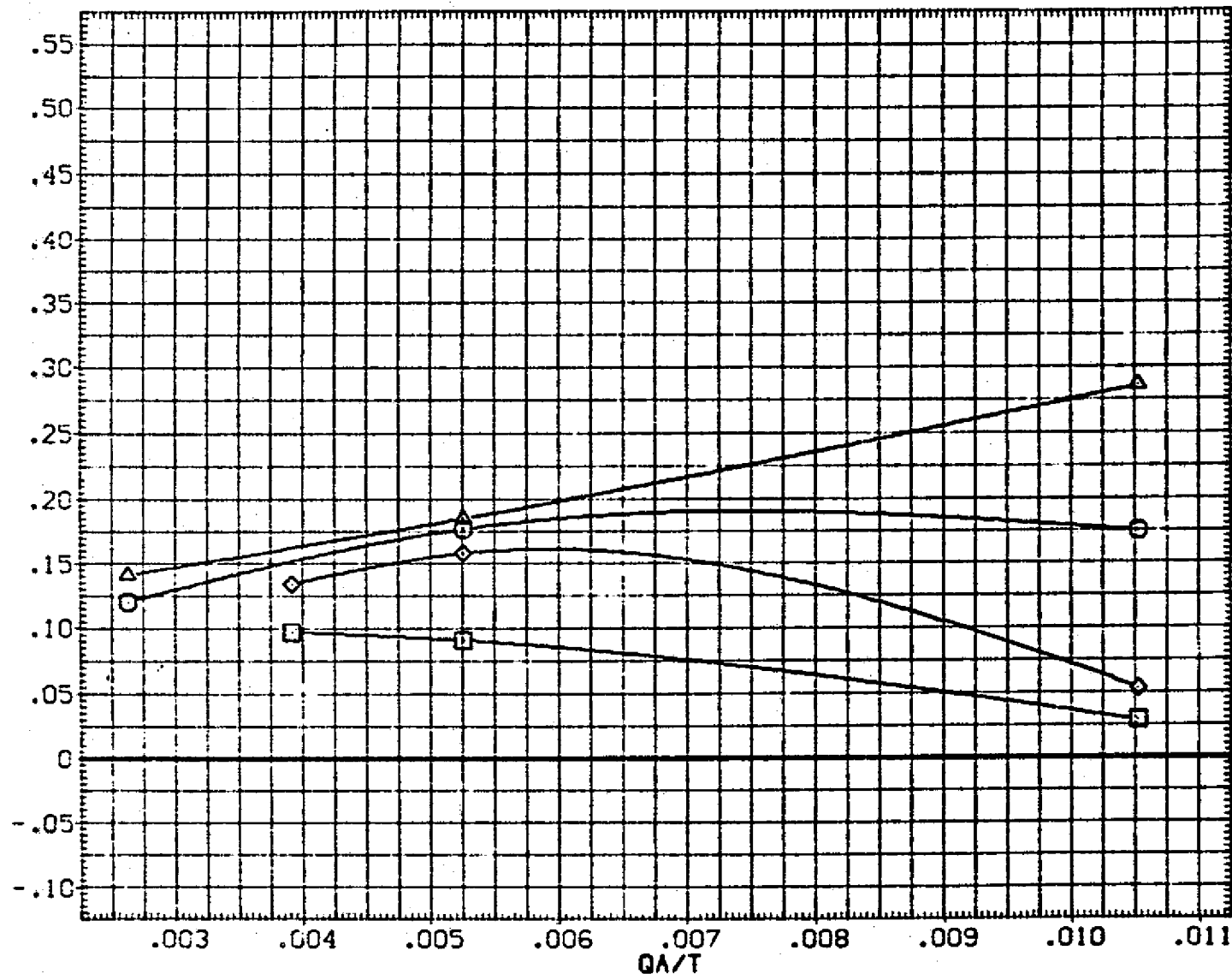


FIGURE 95. AREA RATIO EFFECTS, L/H SIDE FIRING JETS

(E) ALPHA = .00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA079)	01N33 LARC CFHT 118 (MA-22)
(SJA080)	01N37 LARC CFHT 118 (MA-22)
(SJA081)	01N61 LARC CFHT 118 (MA-22)
(SJA005)	01N85 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BD FLAP	BETA	REFERENCE INFORMATION
.000	2.000	.000	.000	SREF 2690.0000 SQ. FT.
.000	2.000	.000	.000	LREF 474.8000 INCHES
.000	2.000	.000	.000	BREF 936.6800 INCHES
.000	2.000	.000	.000	XMRP 1076.7000 IN. X0
				YMRP .0000 IN. Y0
				ZMRP 375.0000 IN. Z0
				SCALE .0100

RCS JET AMPLIFICATION FACTOR - SIDE FORCE, N(SF)

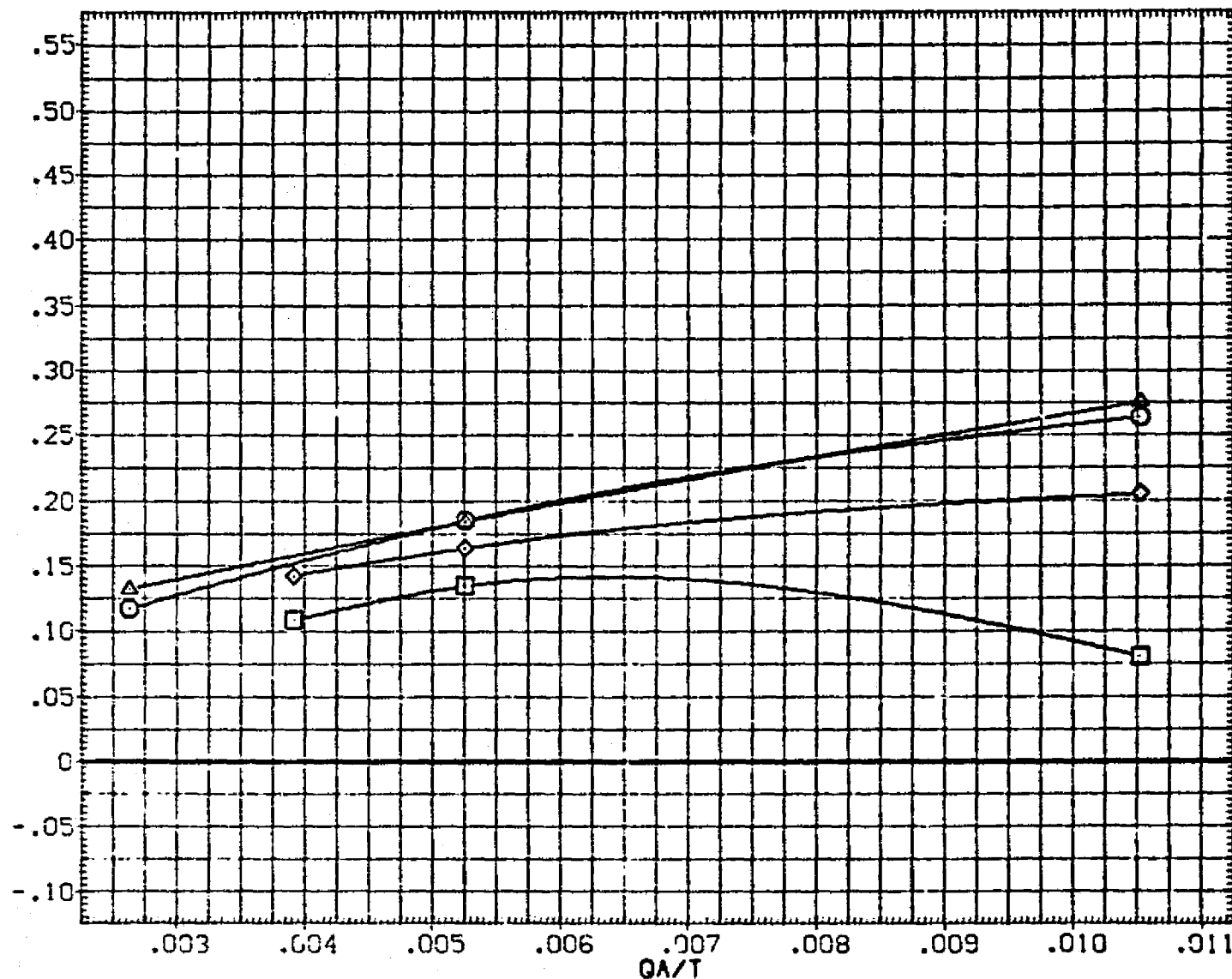


FIGURE 95. AREA RATIO EFFECTS, L/H SIDE FIRING JETS
(F) ALPHA = 2.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA079) □	01N33 LARC CFHT 118 (MA-22)
(SJA080) □	01N37 LARC CFHT 118 (MA-22)
(SJA081) X	01N61 LARC CFHT 118 (MA-22)
(SJA005) △	01N85 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	DDFLAP	BETA	REFERENCE INFORMATION		
.000	2.000	.000	.000	SREF	2690.0000	50. FT.
.000	2.000	.000	.000	LREF	474.8000	INCHES
.000	2.000	.000	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - SIDE FORCE, N(SF)

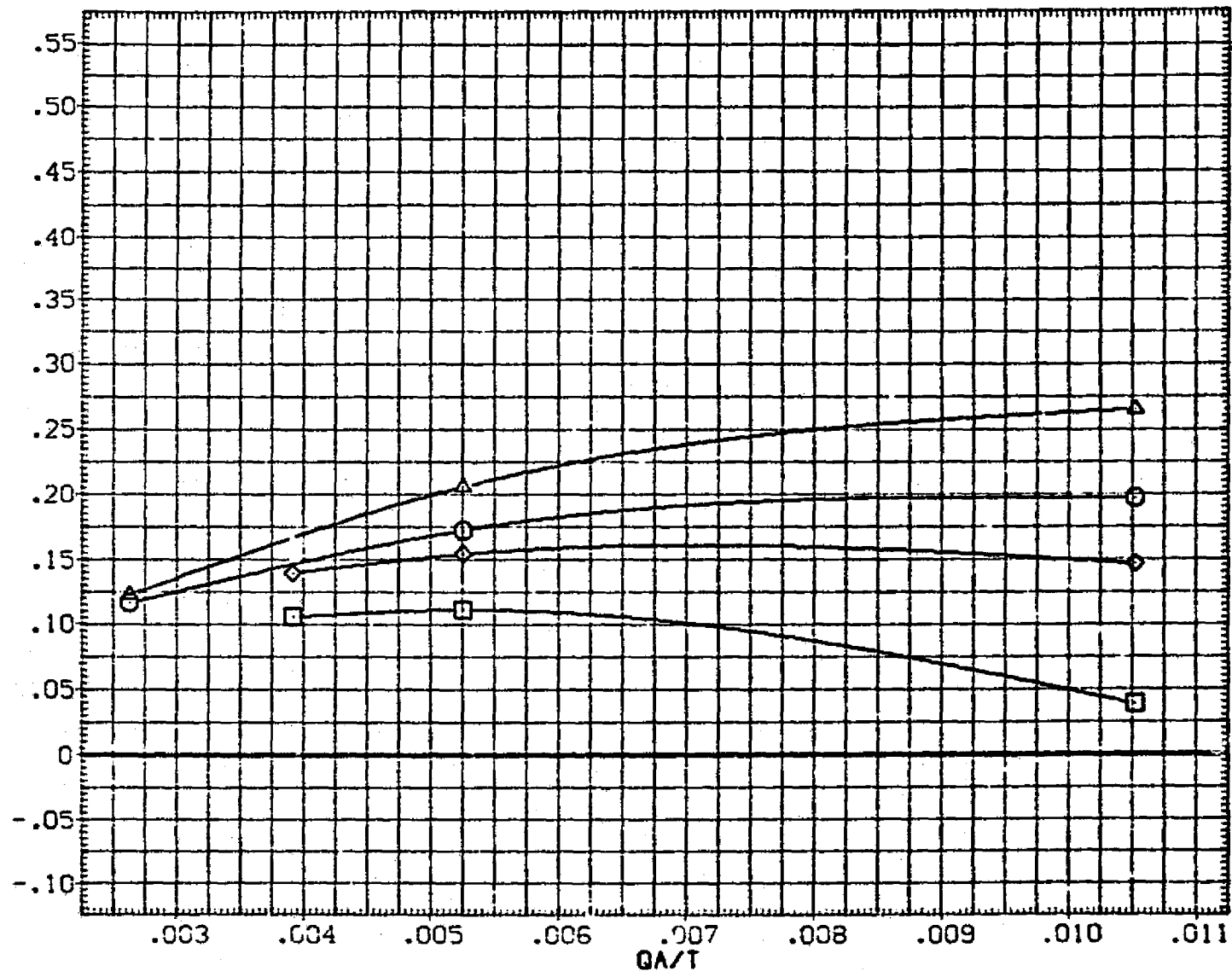


FIGURE 95. AREA RATIO EFFECTS, L/H SIDE FIRING JETS

(G) ALPHA = 4.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA079)	01N33 LARC CFHT 118 (MA-22)
(SJA080)	01N37 LARC CFHT 118 (MA-22)
(SJA081)	01N61 LARC CFHT 118 (MA-22)
(SJA005)	01N85 LARC CFHT 118 (MA-22)

LEVEL	NO. JET	BUFLAP	BETA	REFERENCE INFORMATION
.000	2.000	.000	.000	SREF 2690.0000 SQ. FT.
.000	2.000	.000	.000	LREF 474.8000 INCHES
.000	2.000	.000	.000	BREF 936.6800 INCHES
.000	2.000	.000	.000	XMRP 1076.7000 IN. X0
				YMRP .0000 IN. Y0
				ZMRP 375.0000 IN. Z0
				SCALE .0100

RCS JET AMPLIFICATION FACTOR - SIDE FORCE, N(SF)

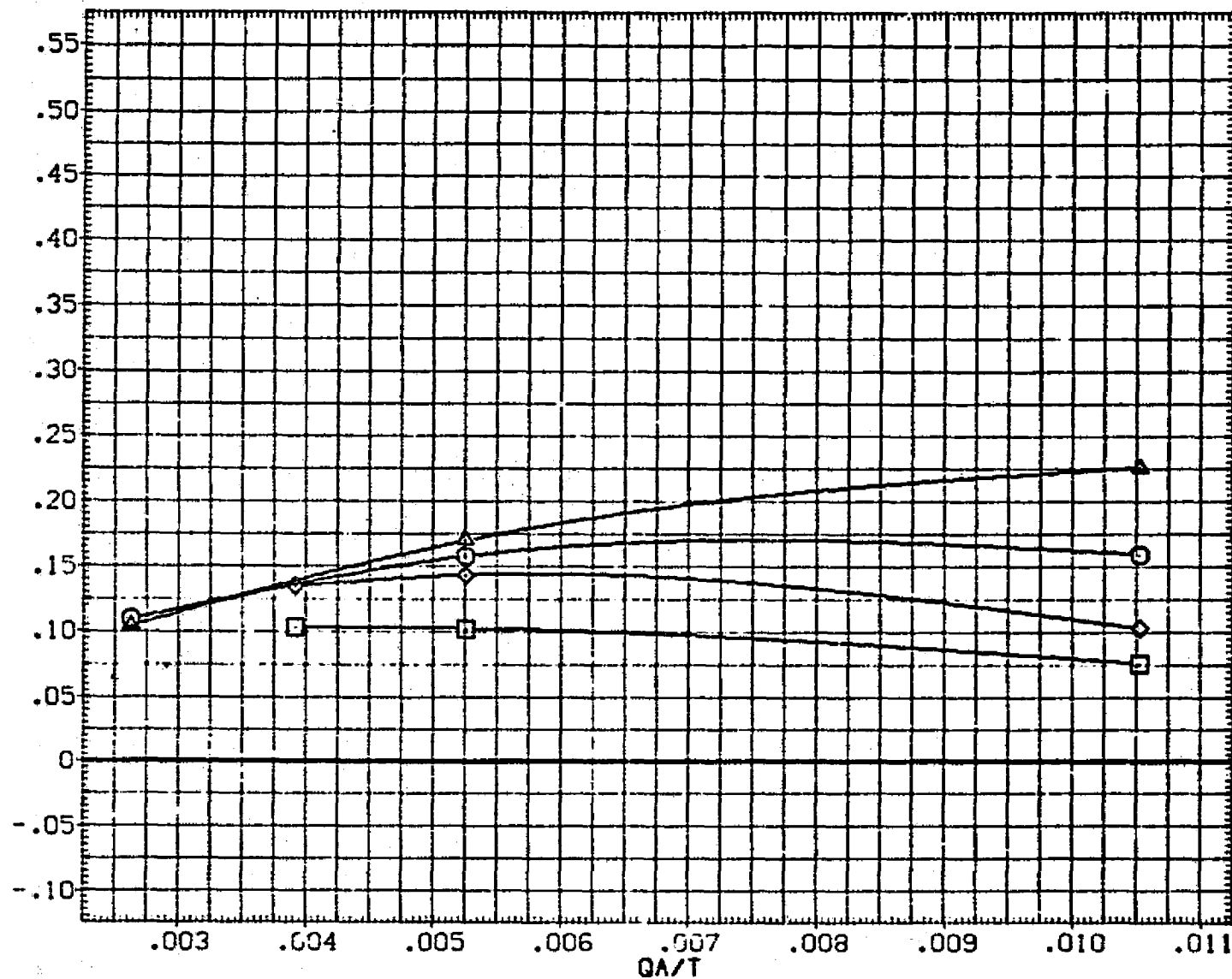


FIGURE 95. AREA RATIO EFFECTS, L/H SIDE FIRING JETS
(H)ALPHA = 6.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	NO. JET	DOFLAP	BETA	REFERENCE INFORMATION		
(SJA079)	01N33 LARC CFHT 118 (MA-22)	.000	2.000	.000	.000	SREF	2690.0000	50. FT.
(SJA090)	01N31 LARC CFHT 118 (MA-22)	.000	2.000	.000	.000	LREF	474.8000	INCHES
(SJA081)	01N61 LARC CFHT 118 (MA-22)	.000	2.000	.000	.000	BREF	936.6800	INCHES
(SJA005)	01N85 LARC CFHT 118 (MA-22)	.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
						YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - SIDE FORCE, N(SF)

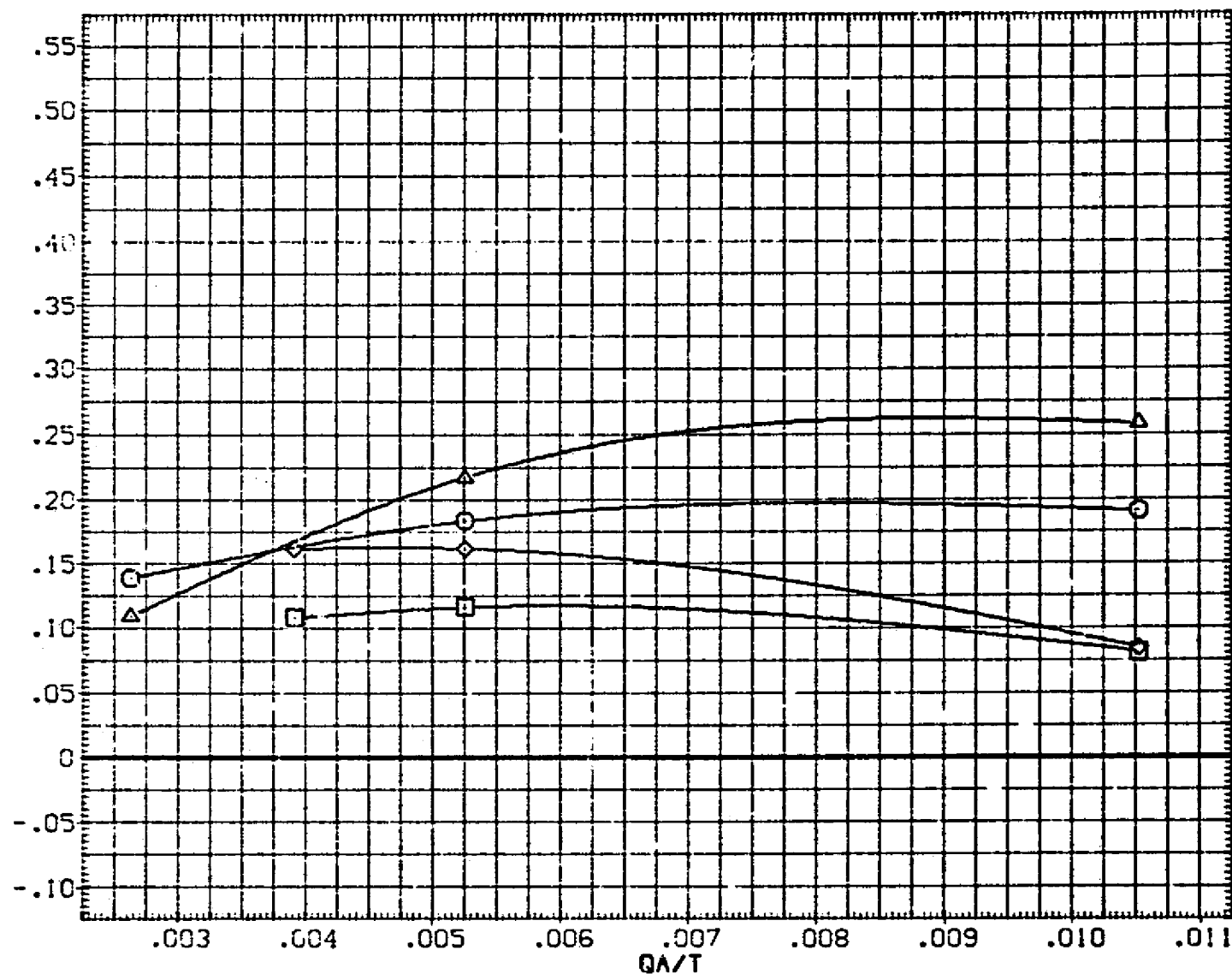


FIGURE 95. AREA RATIO EFFECTS, L/H SIDE FIRING JETS

() ALPHA = 8.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA079)	01N33 LARC CFHT 118 (MA-22)
(SJA080)	01N37 LARC CFHT 118 (MA-22)
(SJA081)	01N61 LARC CFHT 118 (MA-22)
(SJA085)	01N85 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BD FLAP	BETA	REFERENCE INFORMATION
.000	2.000	.000	.000	SREF 2690.0000 SQ. FT.
.000	2.000	.000	.000	LREF 474.8000 INCHES
.000	2.000	.000	.000	BREF 936.6800 INCHES
.000	2.000	.000	.000	XMRP 1076.7000 IN. X0
				YMRP .0000 IN. Y0
				ZMRP 375.0000 IN. Z0
				SCALE .0100

RCS JET AMPLIFICATION FACTOR - SIDE FORCE, N(SF)

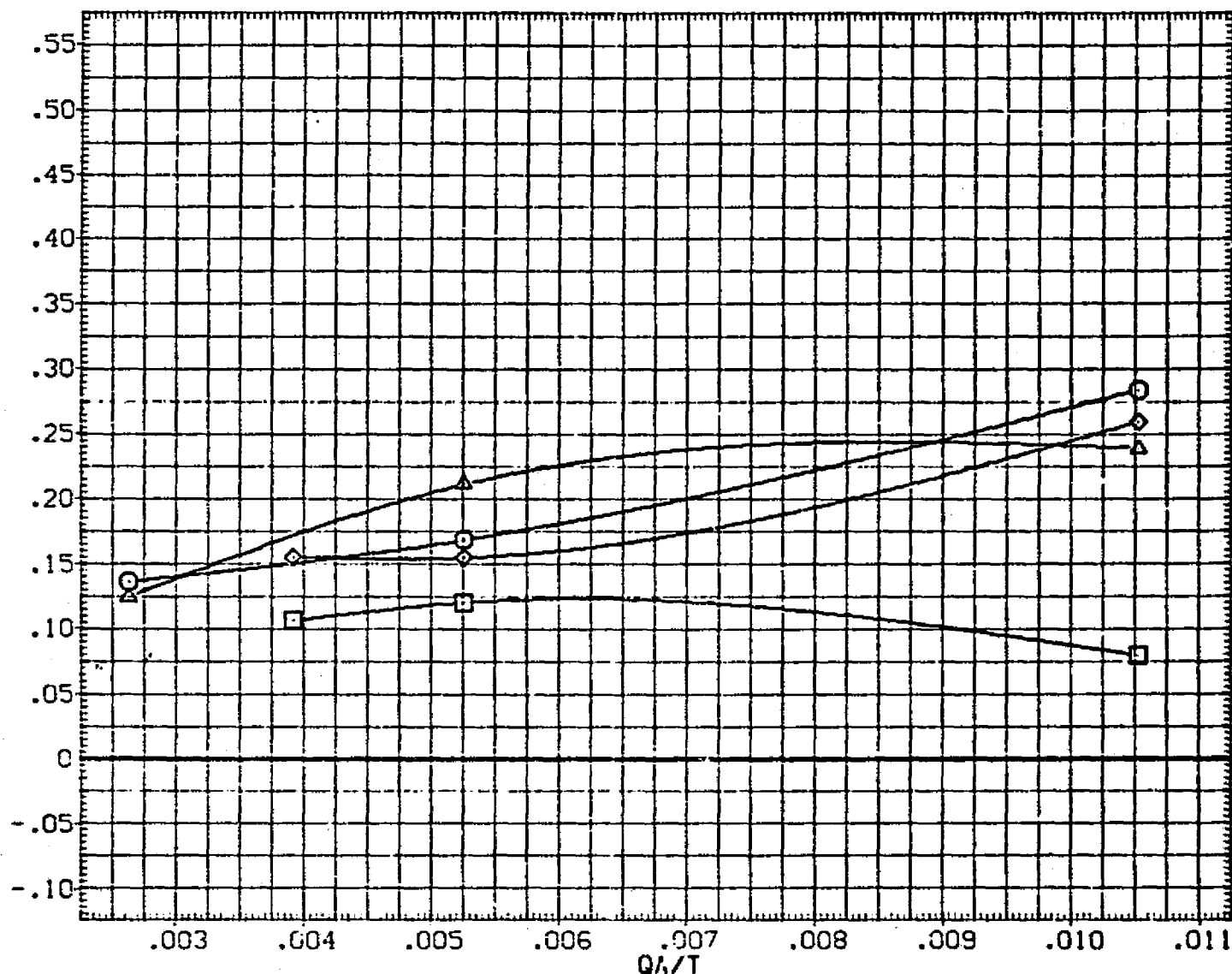


FIGURE 95. AREA RATIO EFFECTS, L/H SIDE FIRING JETS

(J) ALPHA = 10.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA079) □	01N33 LARC CFHT 118 (MA-22)
(SJA080) □	01N37 LARC CFHT 118 (MA-22)
(SJA081) □	01N61 LARC CFHT 118 (MA-22)
(SJA005) △	01N85 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BOFLAP	BETA	REFERENCE INFORMATION		
.000	2.000	.000	.000	SREF	2690.0000	50. FT.
.000	2.000	.000	.000	LREF	474.8000	INCHES
.000	2.000	.000	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - SIDE FORCE, N(SF)

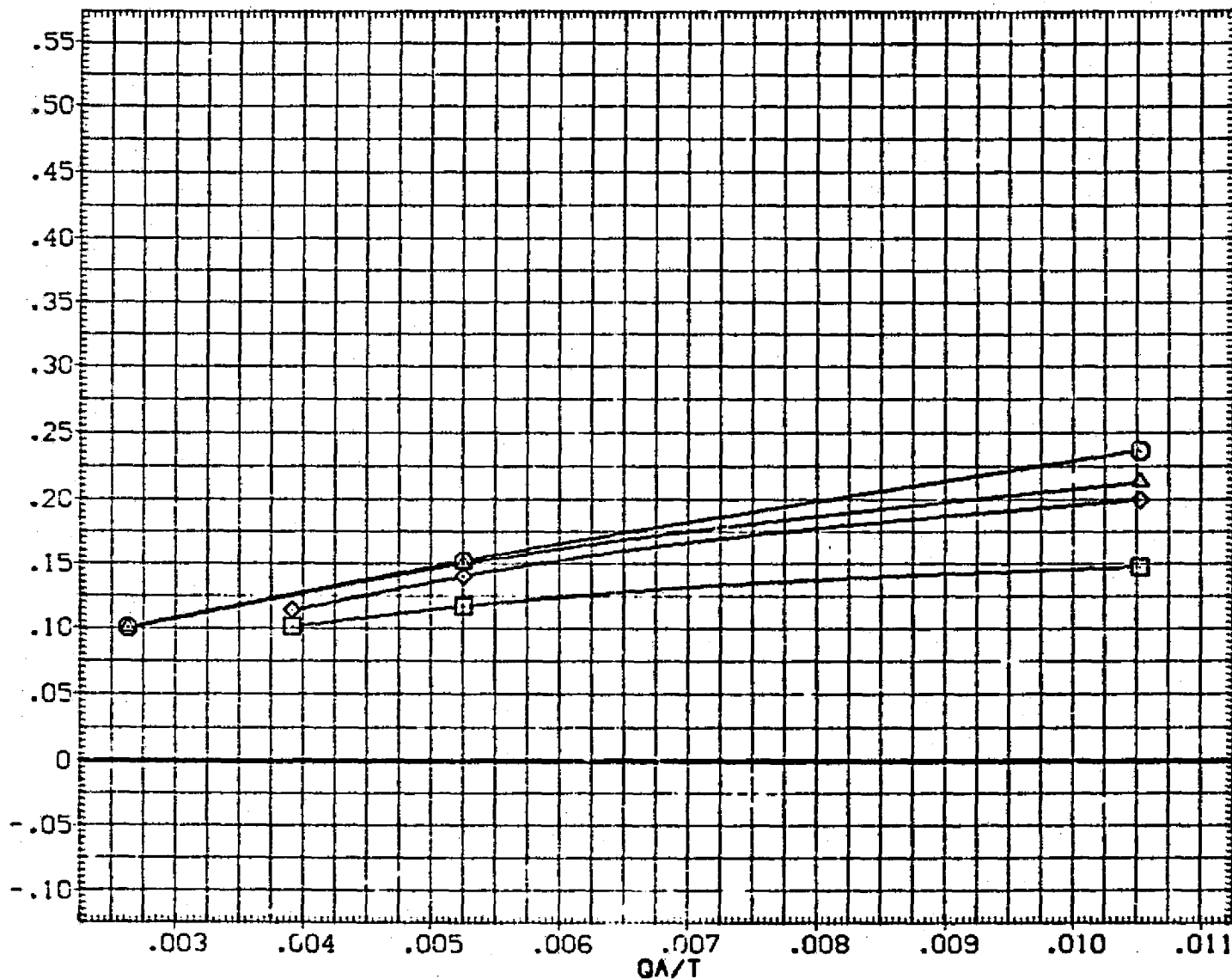


FIGURE 95. AREA RATIO EFFECTS, L/H SIDE FIRING JETS
(K)ALPHA = 15.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA079)	01N33 LARC CFHT 118 (MA-22)
(SJA080)	01N37 LARC CFHT 118 (MA-22)
(SJA081)	01N61 LARC CFHT 118 (MA-22)
(SJA005)	01N85 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BOFLAP	BETA	REFERENCE INFORMATION		
.000	2.000	.000	.000	SREF	2690.0000	50. FT.
.000	2.000	.000	.000	LREF	474.8000	INCHES
.000	2.000	.000	.000	BREF	936.6800	INCHES
.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
				YMRP	.0000	IN. Y0
				ZMRP	375.0000	IN. Z0
				SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - SIDE FORCE, N(SF)

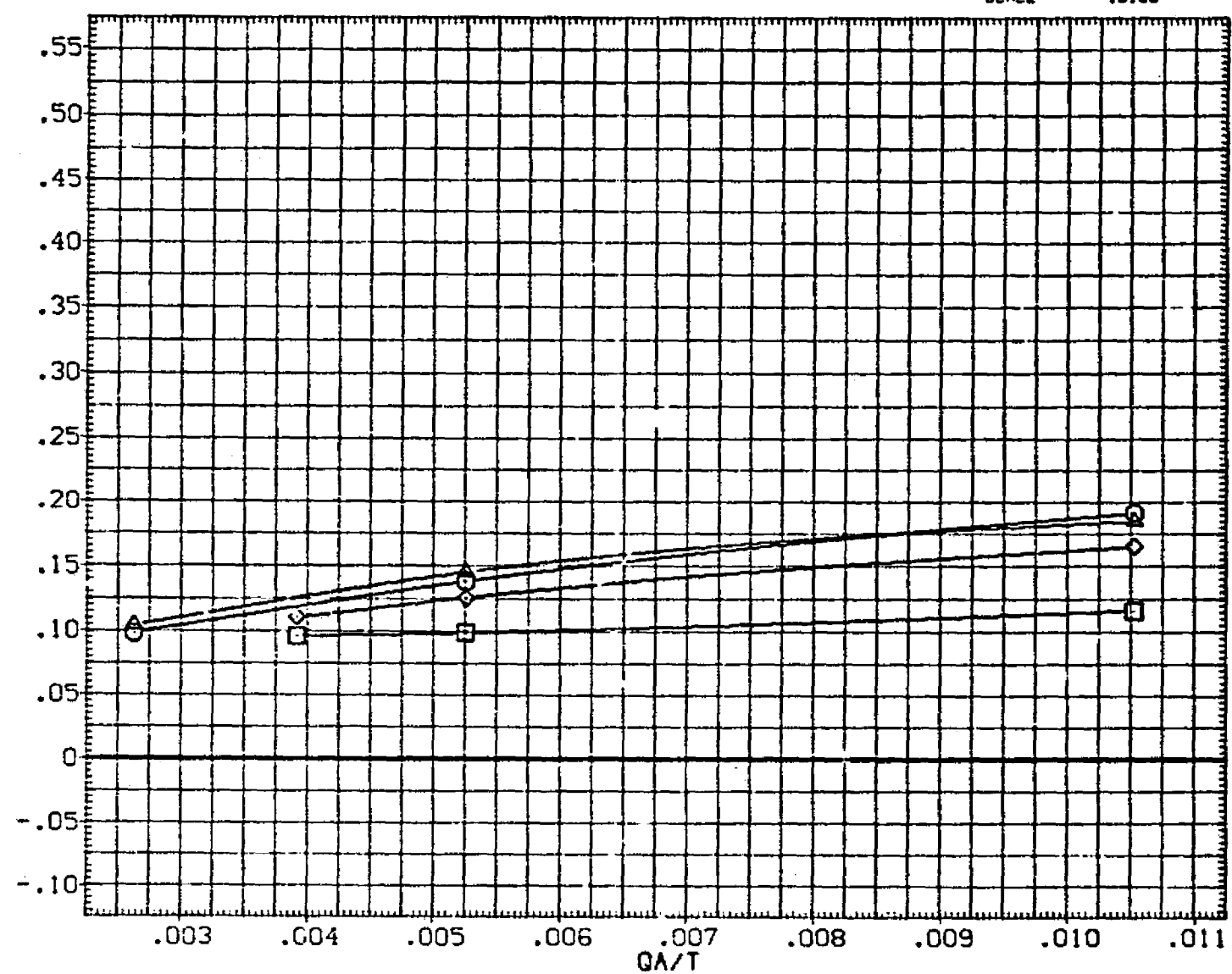


FIGURE 95. AREA RATIO EFFECTS, L/H SIDE FIRING JETS
(L) ALPHA = 20.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA079)	01N33 LARC CFHT 118 (MA-22)
(SJA080)	01N37 LARC CFHT 118 (MA-22)
(SJA081)	01N61 LARC CFHT 118 (MA-22)
(SJA005)	01N85 LARC CFHT 118 (MA-22)

ELEVON	NO. JET	BDPLAF	BETA	REFERENCE INFORMATION
.000	2.000	.000	.000	SREF 2690.0000 SQ. FT.
.000	2.000	.000	.000	LREF 474.8000 INCHES
.000	2.000	.000	.000	BREF 936.6800 INCHES
.000	2.000	.000	.000	XMRP 1076.7000 IN. X0
				YMRP .0000 IN. Y0
				ZMRP 375.0000 IN. Z0
				SCALE .0100

RCS JET AMPLIFICATION FACTOR - SIDE FORCE, N(SF)

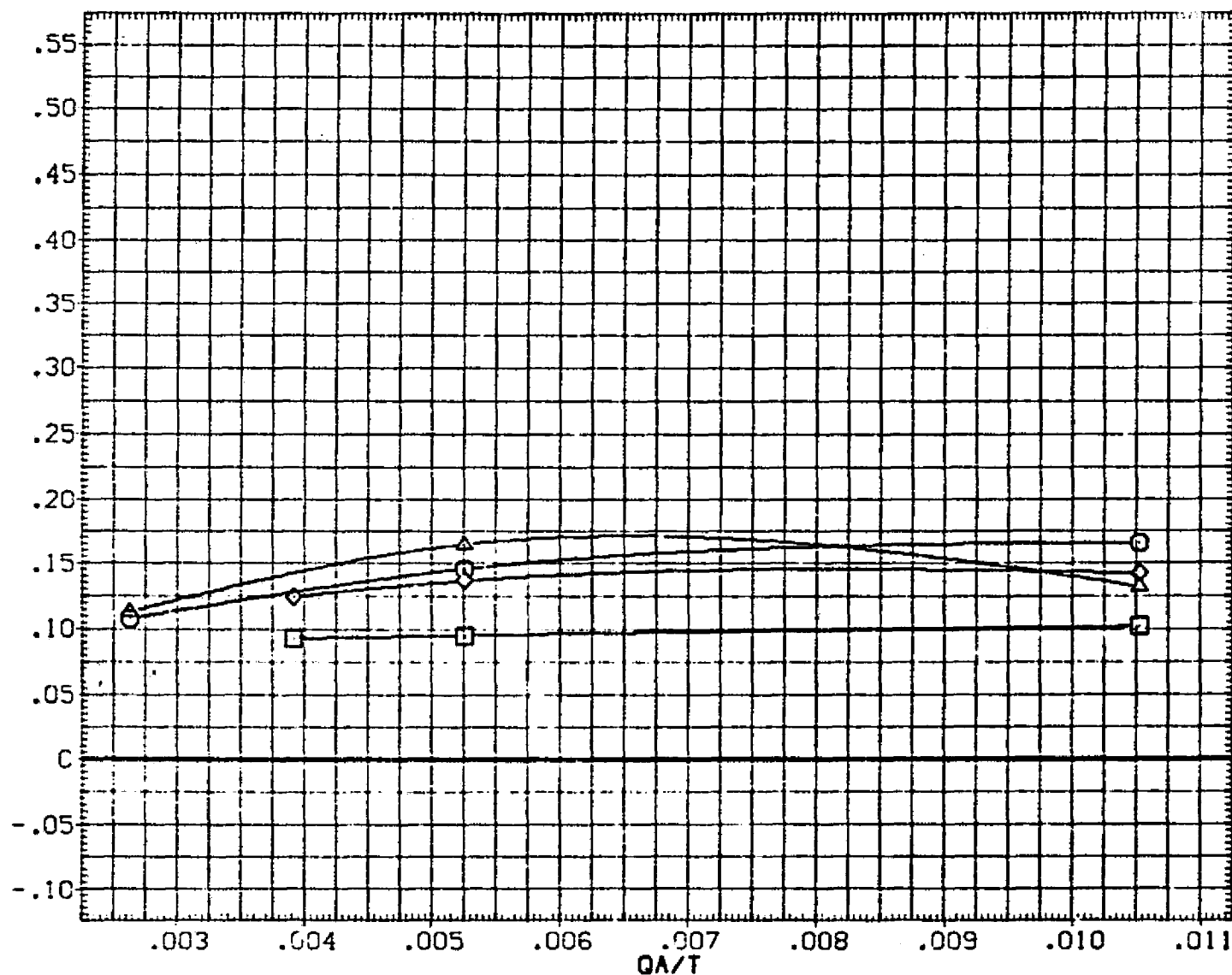


FIGURE 95. AREA RATIO EFFECTS, L/H SIDE FIRING JETS
(M)ALPHA = 25.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	NO. JET	DOFLAP	BETA	REFERENCE INFORMATION		
(SJA079)	01N33 LARC CFMT 118 (MA-22)	.000	2.000	.000	.000	SREF	2690.0000	50. FT.
(SJA080)	01N37 LARC CFMT 118 (MA-22)	.000	2.000	.000	.000	LREF	474.8000	INCHES
(SJA081)	01N61 LARC CFMT 118 (MA-22)	.000	2.000	.000	.000	BREF	936.6800	INCHES
(SJA005)	01N85 LARC CFMT 118 (MA-22)	.000	2.000	.000	.000	XMRP	1076.7000	IN. X0
						YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0100	

RCS JET AMPLIFICATION FACTOR - SIDE FORCE, NCSF)

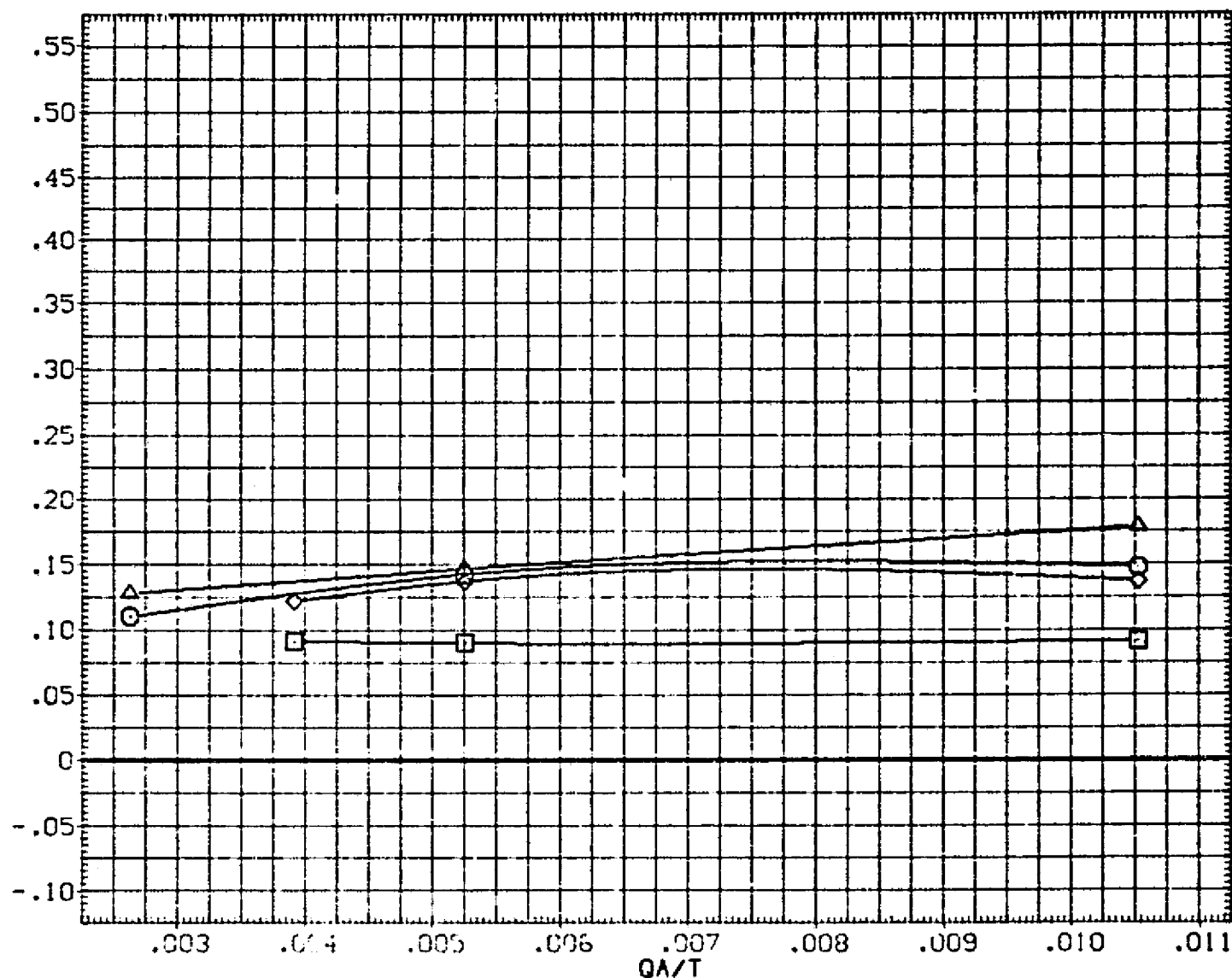


FIGURE 95. AREA RATIO EFFECTS, L/H SIDE FIRING JETS

(N) ALPHA = 30.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(SJA079)	QIN33 LARC CFHT 118 (MA-22)
(SJA080)	QIN37 LARC CFHT 118 (MA-22)
(SJA081)	QIN61 LARC CFHT 118 (MA-22)
(SJA005)	QIN85 LARC CFHT 118 (MA-22)

ELEVON	NOJET	BOFLAP	BETA	REFERENCE INFORMATION
.000	2.000	.000	.000	SREF 2690.0000 SQ.FT.
.000	2.000	.000	.000	LREF 474.8000 INCHES
.000	2.000	.000	.000	BREF 935.6800 INCHES
.000	2.000	.000	.000	XMRP 1076.7000 IN. X0
				YMRP .0000 IN. Y0
				ZMRP 375.0000 IN. Z0
				SCALE .0100

RCS JET AMPLIFICATION FACTOR - SIDE FORCE, N(SF)

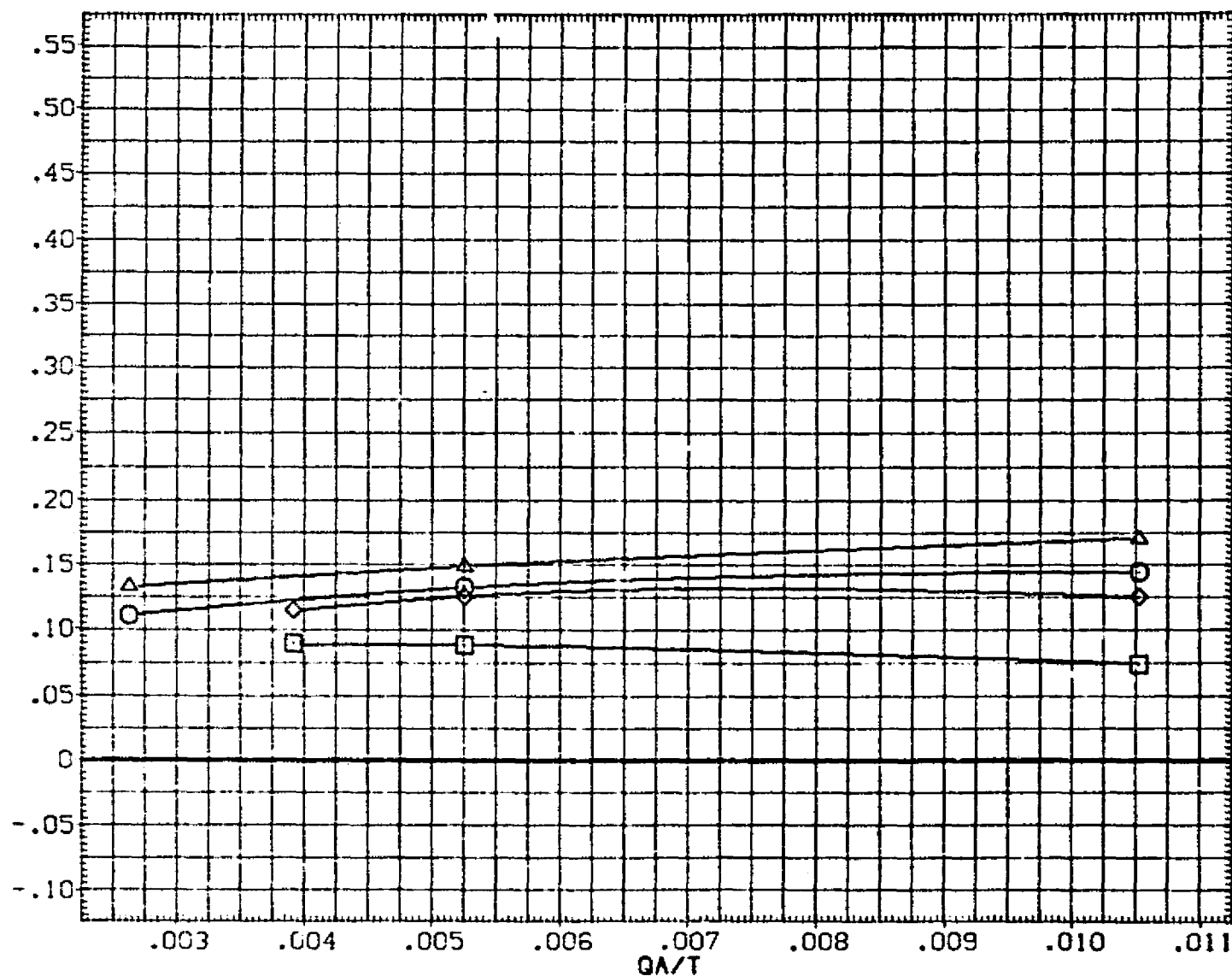


FIGURE 95. AREA RATIO EFFECTS, L/H SIDE FIRING JETS

(C) ALPHA = 35.00